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THE IMPACT OF ALTERNATIVE FEDERAL GRAZING FEES ON WESTERN

LIVESTOCK BUSINESSES

Report

For

USDA-Forest Service (FS)

And

USDI-Bureau of Land Management (BLM)

Submitted By:

USDA-Economic Research Service (ERS)

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16. Abstract (Limit: 200 words) Many western livestock businesses depend on Federal rangelands administered by the USDA Forest Service or the USDI Bureau of Land Management as a feed resource. Between 10-15 percent of the sheep in the 13 Western States were in herds that graze Federal rangeland. In the short-run most grazing users will continue to graze these lands if fees are increased to as high as \$10 per animal unit month. In the long-run few users would have money to pay family labor, debt service costs, and a return on personal capital if fees are raised significantly and product prices remain near 1982 levels. ***** NOTE: The budgets represented in this report are different in methodology than the official published RMA estimates of livestock cost of production. The treatment of interest expense *****			
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NOTE: The budgets represented in this report are different in methodology than the official published ERS estimates of livestock cost of production. The treatment of interest expense on fixed assets, costing of fixed assets, and an allocation of returns to economic factors are the main areas of difference. Gross returns and most cash costs are same in both methodologies. These budgets were prepared per Forest Service/Bureau of Land Management contract specifications concerning the use of a prior ERS methodology to be consistent with previously submitted contract work to FS/BLM. For discussion of the current ERS methodology, see Economic Indicators of the Farm Sector: Costs of Production, 1982, USDA-ERS, ECIFS 2-3, December, 1983.

SUMMARY

Many western livestock producers depend on federal rangeland as a feed resource. There were 11.4 million beef cows and 5.2 million sheep in 1982 in the 13 western states where most federal grazing permits are located. Between 10 percent and 15 percent of the cattle and over 50 percent of the sheep in these states were in herds that graze federal rangeland. An analysis of impacts of grazing fee increases on ranch businesses that had federal grazing permits in 1982 indicates:

- In the short run most permittees can benefit from use of federal rangeland even if fees approach \$10.00 per animal month since it would still be one of the least expensive feed sources available.
- In the long run few permittees would have money to pay family labor, debt service costs, and a return on personal capital if fees are raised significantly and product prices remain near 1982 levels.
- Large livestock enterprises tend to be less dependent on federal grazing than smaller enterprises and usually have lower average production costs per head.
- Because of characteristics indicated above, large livestock enterprises are better able to accommodate grazing fee increases than are the smaller enterprises.
- Permittees in the southwestern states where there is yearlong grazing have the highest dependency on federal rangeland for feed and would be impacted most as a region by grazing fee increases.
- There is a wide range in profitability among livestock producers. In 1982 cattle and sheep prices were depressed, placing many producers in a loss situation and others at a breakeven level. Grazing fee increases would cause more producers to operate at a loss.

INTRODUCTION

Many western livestock producers depend on federal rangeland as a feed source. In 1985 the Forest Service (FS)) and Bureau of Land Management (BLM) must submit to Congress recommendations on changes in grazing fees charged these producers. The agencies are concerned that the fees reflect the value of the resource, but that they do not adversely affect individual livestock businesses or the livestock industry in areas where there is much federally owned grazing land. This report summarizes an analysis of direct impacts on livestock businesses and aggregate industry impacts of various grazing fee levels. Impacts are measured in terms of income, net return and herd size changes.

IMPORTANCE OF FEDERAL RANGELAND

Federally owned rangeland is found throughout the West. Most livestock grazing on National Forest and BLM land, excluding National Grasslands, is in the 11 western states plus South Dakota and Nebraska. Published statistics for 1982 indicate the following for these 13 States:

	Cattle		Sheep	
	<u>Permittees</u>	<u>Animals Grazed</u>	<u>Permittees</u>	<u>Animals Grazed</u>
Forest Service	12,184*	1,091,990	--	1,227,276
Bureau of Land Management	19,783	2,038,298	2,030	2,038,298

* Includes sheep permittees

There were 11.4 million beef cows and 5.2 million sheep in these states in 1982. Therefore, about 10 percent and 15 percent of the beef cattle used FS and BLM rangeland respectively and 23 percent and 37 percent of the sheep grazed these two feed sources.

The importance of Federal rangeland to individual state cattle businesses and the western cattle industry is further illustrated in Table 1. About 35 percent of beef cows in the 13 state area are in herds where part or all of the cattle graze on FS and BLM land. A recent sheep industry study indicates that "more than 50 percent of sheep in the 17 western states are owned by businesses affected by Federal grazing land policies."^{1/} Therefore, it is apparent that changes in grazing fee policies will affect a significant proportion of the western cattle and sheep industries.

METHODOLOGY

Financial impacts of different grazing fee levels were measured with the use of livestock enterprise budgets and a linear programming analysis.^{2/} Cattle and sheep budgets were constructed for National Forest and BLM resource areas as shown in Figure 1. A total of 427 cattle budgets and 73 sheep budgets were the base data for the analysis (Table 2). Budgets represented different herd sizes and seasons of public land use within each geographical area. The base year was 1982. Specific procedures were as follows:

1. Weighted average state budgets were prepared for beef cows and sheep (Tables C1 through C21). The number of individual budgets contributing to each state weighed average is shown in Table 2. Weighting factors were the number of beef cows or ewes represented by each budget.

^{1/} C. Kerry Gee and Albert G. Madsen, Sheep Production in the 17 Western States, Colo. Stat. Univ., Exp. Sta. Special Series 24, April 1983.

^{2/} For a discussion of budget preparation procedures and linear programming model construction see, C. Kerry Gee, Estimating Impacts of Adjustments in Grazing on Federal Lands and Estimating Federal Rangeland Forage Values, Colo. Stat. Univ. Exp. Sta., Tech. Bul. 143, November 1981.

Table 1--January beef cow inventory and beef cows in herds with some dependency on Federal rangeland by state, 1982.

State	January beef cow inventory 1/	Beef cows in herds that use Federal rangeland 2/	
	---1,000 head---		Percent 3/
Arizona	275	174	63
California	1,160	327	28
Colorado	945	285	30
Idaho	562	497	88
Montana	1,604	879	55
Nebraska	2,148	63	3
Nevada	359	291	81
New Mexico	565	290	51
Oregon	730	417	57
South Dakota	1,595	62	4
Utah	364	210	58
Washington	443	58	13
Wyoming	673	432	64
Total	11,423	3,985	35

1/ See Livestock and Meat Statistics, Supplement for 1982, U.S. Department of Agr., Econ. Res. Serv. Stat. Bul. 522. October 1983

2/ Estimated from livestock enterprise budget data.

3/ Beef cows in herds that use Federal rangeland as a percent of January inventory.

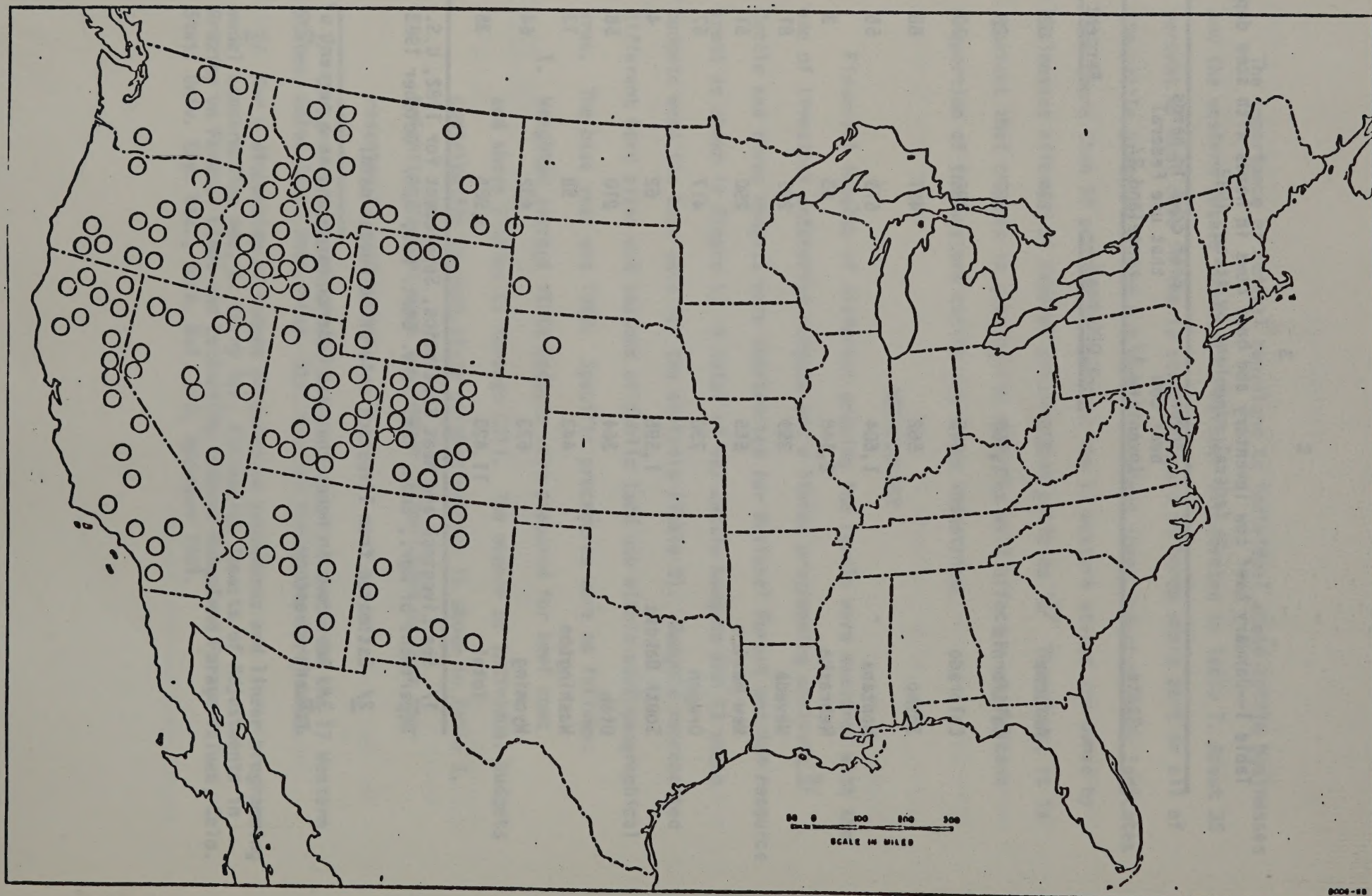


Figure 1--Geographical locations represented by livestock enterprise budgets for National Forests and Bureau of Land Management resource planning units.

Reproduced from



Table 2--Number of livestock budgets used to estimate weighted average state budgets

State	Cattle			Sheep		
	FS	BLM	Total	FS	BLM	Total
	Number					
Arizona	18	10	28	--	--	--
California	21	7	28	3	--	3
Colorado	25	20	45	6	5	11
Idaho	30	34	64	8	8	16
Montana	33	20	53	2	1	3
Nebraska	3	--	3	--	--	--
Nevada	6	28	34	2	4	6
New Mexico	15	16	31	2	2	4
Oregon	24	19	43	3	--	3
South Dakota	3	--	3	--	--	--
Utah	14	37	51	7	11	18
Washington	10	--	10	1	--	1
Wyoming	15	19	34	3	5	8
Total	217	210	427	37	36	73

2. A linear programming model of each weighted average state budget was prepared which would reproduce the same return above cash costs and herd size as shown in the budget.
3. Solutions were obtained from the state linear programming models for grazing fees ranging from \$2.00 to \$10.00 per animal month by \$2.00 increments. Impacts of the fee levels were measured in terms of gross income, total cash costs, feed costs, return above cash costs and capital replacement.
4. Aggregate state impacts were estimated by multiplying the impacts generated per cow or ewe from the model by the total number of cows or ewes in the state represented by the budgets..
5. Aggregate regional impacts were the sum of the aggregate state impacts.

The linear programming analysis allowed changes in season of use for feeds commonly transferable between seasons. Hay purchase was the only source of additional feed allowed in the model.

Level of dependency is important in analyzing the impact fee changes will have on a livestock business. A cow herd 50 percent dependent on Federal rangeland for its annual feed supply will be affected much more seriously by a fee increase than a herd which is only 10 percent dependent on the Federal range. Four geographical areas with different levels of dependency were studied individually to show this relationship.

THE ECONOMIC SITUATION OF WESTERN CATTLE AND SHEEP BUSINESSES

Cattle and sheep businesses in the West have experienced financial difficulties in recent years. Since 1979 product prices have fallen while costs of production have continued to increase. USDA statistics illustrate

the situation for both cattle and sheep.^{3/} Receipts per cow dropped from \$325 in 1980 to \$280 in 1982. Between the same years total cash expenses increased from \$235 to \$265 per cow. This resulted in a drop in the return above cash costs from \$90 to \$15 per cow. Sheep businesses suffered from the same problem, although less pronounced. Cash receipts dropped from \$51 to \$47 per ewe; total cash costs were up from \$37 to \$41 so the return above cash costs fell from \$12 to \$4 during this three-year period.

These conditions placed the finances of western livestock producers in a difficult position in 1982, the base year of this analysis. Based on current forecasts, it is likely that livestock prices will improve over the next several years resulting in a marginally improved financial situation in which producers would have to accommodate changes in Federal grazing fees.

LIVESTOCK ENTERPRISE BUDGET FORMAT

Measurement of economic impacts of different fee levels was accomplished through the use of cattle and sheep enterprise budgets. The format can be seen in Tables C1-C21. Cattle sales include calves, yearlings, and cull cows. Sheep enterprises sell lambs, wool, cull ewes and receive wool incentive payments.

Expenditures are divided into cash costs and other costs. Cash costs include all inputs involving direct cash outlays. One exception is interest on operating capital. Although most producers do pay this cost, an unknown percentage of producers use their own money which reduces direct cash outlays for interest. Since data are not available to partition paid and unpaid interest on operating capital, the entire amount is treated as a cash expense.

^{3/} Economic Indicators of the Farm Sector, Costs of Production, 1982, U.S. Dept. of Agr., Econ Res. Serv., ECIFS 2-3, December 1983.

Other costs include family labor, capital replacement (depreciation), interest on investment other than land, and interest on land. These are separated from cash costs for two reasons: first, payment can often be deferred or partially deferred in any given year; second direct cash payments may not be involved. For example, a rancher that has no outstanding long term debt would make no cash payment for interest on investment or if long term debts are partially paid, cash outlay would be less than the full amount indicated.

These characteristics of the other cost items also enter into calculation of returns. First cash costs are subtracted from total sales to show returns above cash costs. These are the dollars available to pay all other costs. Then family labor is subtracted followed by capital replacement, and interest on investment other than land. Return to land is the residual claimant of total sales after all other costs are paid. Under 1982 economic conditions this residual was usually negative.

The analysis of fee impacts keys on total sales (gross income), total cash costs and the return above cash costs. The latter item gives a measure of dollars available to pay other costs as fee levels change.

IMPACTS OF ALTERNATIVE GRAZING FEES

Income and Returns per Cow

As grazing fees were adjusted from \$2.00 to \$10.00 per animal month, immediate impacts were on total cash costs. This is illustrated in Table 3 which presents gross income and return above cash costs per cow and per ewe for the weighted average state budgets. Gross income per head remains unchanged as fee levels increase. However, return above cash costs dropped,

Table 3--Gross income and return above cash costs per head for weighted average cattle and sheep budgets with alternative Federal grazing fees, 13 western states 1982

Item	\$2.00 Fee		\$4.00 Fee		\$6.00 Fee		\$8.00 Fee		\$10.00 Fee	
	Return		Return		Return		Return		Return	
	above		above		above		above		above	
	Gross	cash	Gross	cash	Gross	cash	Gross	cash	Gross	cash
	income	costs 1/	income	costs 1/	income	costs 1/	income	costs 1/	income	costs 1/
dollars/cow										
Cattle:										
Arizona	211.07	80.65	211.07	61.08	211.07	41.51	211.07	21.94	211.07	-12.00
California	252.18	46.97	252.18	42.54	252.18	38.11	252.18	33.68	252.18	29.25
Colorado	288.85	72.89	288.85	65.23	288.85	57.57	288.85	49.91	288.85	42.25
Idaho	246.93	43.05	246.93	36.31	246.93	29.54	246.93	22.83	246.93	16.09
Montana	275.88	76.35	275.88	73.03	275.88	69.71	275.88	66.39	275.88	63.07
Nebraska	305.03	116.48	305.03	112.95	305.03	109.41	305.03	105.88	305.03	102.35
Nevada 2/	214.79	34.43	214.79	21.60	214.79	8.77	214.79	-4.06	214.79	25.58
New Mexico	237.50	92.24	237.50	78.07	237.50	63.90	237.50	49.73	237.50	66.40
Oregon	252.54	75.18	252.54	68.30	252.54	61.42	252.54	54.54	252.54	47.66
S. Dakota	228.73	32.55	228.73	29.21	228.73	25.46	228.73	21.92	228.73	18.37
Utah	220.36	36.66	220.36	25.79	220.36	14.92	220.36	4.05	220.36	13.16
Washington	283.64	74.85	283.64	70.89	283.64	66.93	283.64	62.97	283.64	59.01
Wyoming	263.89	79.26	263.89	72.74	263.89	66.22	263.89	59.70	263.89	53.18
Sheep:										
dollars/ewe										
Arizona 3/										
California	50.18	15.83	50.18	14.67	50.18	13.51	50.18	12.35	50.18	11.19
Colorado	60.53	24.49	60.53	22.70	60.53	20.91	60.53	19.12	60.53	17.33
Idaho	63.70	31.26	63.70	29.48	63.70	27.70	63.70	25.92	63.70	24.14
Montana	56.24	21.90	56.24	20.28	56.24	18.66	56.24	17.04	56.24	15.42
Nebraska 3/										
Nevada	52.74	25.80	52.74	23.31	52.74	20.82	52.74	18.33	52.74	15.84
New Mexico	49.10	22.72	49.10	20.13	49.10	17.54	49.10	14.95	49.10	12.36
Oregon	60.28	15.74	60.28	14.42	60.28	13.10	60.28	11.78	60.28	10.46
S. Dakota 3/										
Utah	58.78	18.67	58.78	16.03	58.78	13.39	58.78	10.75	58.78	8.11
Washington 3/										
Wyoming	57.11	22.35	57.11	19.46	57.11	16.57	57.11	13.68	57.11	10.79

1/ Cash costs do not include value of family labor, capital replacement allowance (depreciation), or interest on investment. These costs must be paid from the return above cash costs.

2/ Return above cash costs per cow for a reduced herd size improved after cows being carried at a loss were dropped from the herd.

3/ There were not enough sheep grazing any single forest or resource area to justify preparing sheep enterprise budgets.

reflecting the increased cost of forage and associated interest on operating capital. There were no partial reductions in use of grazing permits as fees increased. Either they were fully utilized or not used at all. It appears that the average producer could accommodate an increase in grazing fees. But since there is no way to keep total feed costs down as grazing fees rise, each fee increase caused an equally large reduction in returns above cash costs. This reduced funds available for family expenses, purchase of new equipment, and debt repayment. Therefore, all fee increases will have these kinds of negative economic impacts on livestock businesses.

The analysis indicated that the best strategy for many producers is to continue use of their grazing permits even when fees reach or exceed \$10.00. They would still pay their cash costs and make some contribution to other costs. Therefore, in the short run fees higher than current levels could be paid.

The financial well-being of Federal grazing land users was different when viewed in a long run perspective in which all costs listed in the budgets must be paid. Even at a \$4.00 fee level few producers would have funds for debt service or a return on personal capital invested in the business (Table 4). Capital assets would deteriorate over time and many producers would not receive adequate payment for their labor which would result in a lower family living standard.

These conclusions are based on costs and returns for livestock under 1982 conditions which were discussed earlier. A sensitivity analysis of cattle and sheep market prices indicated that a 10-15 percent increase would give most producers full payment for their labor and funds for capital replacement and long term debt service, even if grazing fees were increased well above 1982 levels. The analysis presented above is also based on average costs and

Table 4--Return to investment and return to land for weighted average cattle and sheep budgets,
13 western states 1982

State	\$4.00 Fee		\$6.00 Fee		\$8.00 Fee		\$10.00 Fee	
	Return to investment	Return to land	Return to investment	Return to land	Return to investment	Return to land	Return to investment	Return to land
<u>Dollars/cow</u>								
Cattle:								
Arizona	8.97	-86.67	1/	1/	1/	1/	1/	1/
California	- 2.81	-93.81	T/	T/	T/	T/	T/	T/
Colorado	4.66	-99.63	T/	T/	T/	T/	T/	T/
Idaho	-19.13	-113.48	T/	T/	T/	T/	T/	T/
Montana	22.07	-70.53	18.75	T/	15.43	T/	12.11	T/
Nebraska	61.09	-26.00	57.55	T/	54.02	T/	50.49	T/
Nevada	-23.56	-124.71	1/	T/	1/	T/	1/	T/
New Mexico	25.46	-61.33	11.29	T/	-2.88	T/	T/	T/
Oregon	31.37	-58.28	24.49	T/	17.61	T/	10.73	T/
S. Dakota	-37.70	-145.33	1/	T/	1/	T/	1/	T/
Utah	-36.92	-135.11	T/	T/	T/	T/	T/	T/
Washington	6.69	- 87.06	T/	T/	T/	T/	T/	T/
Wyoming	14.78	- 75.58	8.26	T/	1.74	T/	T/	T/
<u>Dollars/ewe</u>								
Sheep:								
California	1.50	- 9.78	1/	1/	1/	1/	1/	1/
Colorado	12.94	1.40	11.15	- .39	9.36	T/	7.59	T/
Idaho	18.46	6.83	16.68	5.05	14.90	3.27	13.12	1.49
Montana	8.51	-4.13	6.89	1/	5.27	1/	3.65	1/
Nevada	12.11	.50	9.67	-1.99	7.18	T/	4.69	T/
New Mexico	5.79	-7.28	3.20	1/	.61	T/	1/	T/
Oregon	1.09	-13.05	1/	T/	1/	T/	T/	T/
Utah	4.02	- 8.41	1.38	T/	T/	T/	T/	T/
Wyoming	8.92	- 3.03	6.03	T/	3.14	T/	.25	T/

1/ Return continues to be negative at these fee levels.

returns. There are groups of permittees who will be impacted more or less seriously than the average suggests. At least three factors contribute to these differences 1) level of dependency on federal grazing, 2) size of herd and 3) enterprise viability. The importance of these factors is discussed below.

High dependency areas

There is a wide range in dependency on Federal rangeland among livestock permittees. Those with the highest dependency as a group are in the southwestern states where winters are mild, yearlong grazing occurs, and there are large acreages of federal rangeland (Table 5). Cattlemen in Arizona, New Mexico, Nevada and Utah averaged more than 30 percent dependency with Arizona highest at 60 percent. Montana permittees had the lowest dependency for cattle averaging only 11 percent. Most sheepmen with permits are heavy users of federal rangeland. Those in New Mexico average highest at 49 percent. Utah and Nevada sheepmen are also highly dependent on federal grazing lands, averaging over 40 percent dependency. Regardless of the geographical area there is always a distribution of producers over a wide range of dependency. This is illustrated with national forest permittee data in Table 6. There will be some producers in all parts of the West who will be seriously impacted by fee increases due to a high dependency of their business on federal rangeland.

Four geographical areas were analyzed to test the impact of fee increases on high dependency livestock businesses, these were the Prescott National Forest in Arizona, the BLM Schell resource area in Nevada, the Gila National Forest in New Mexico, and the Ashley National Forest in Utah. The analysis indicated that high dependency permittees cannot assimilate large fee increases (Table 7). Where dependency reaches 70-80 percent, a fee of even \$4.00 will

Table 5--Average dependency of permittee livestock businesses on Federal rangeland for annual feed supply, 13 western states ^{1/}

State	Cattle	Sheep
	<u>Percent</u>	
Arizona	60	2/
California	15	24
Colorado	25	37
Idaho	23	35
Montana	11	35
Nebraska	13	--
Nevada	36	43
New Mexico	44	49
Oregon	23	27
South Dakota	12	--
Utah	35	47
Washington	13	--
Wyoming	23	29

^{1/} Dependency is AUMs of feed from Federal rangeland divided by total annual AUMs required by the entire herd.

^{2/} There were not enough sheep grazing on one national Forest or BLM resource area to justify preparation of an enterprise budget.

Table 6--Distribution of permittees based on dependence on national forest rangeland for their annual beef herd feed supply.

Dependency on national forest rangeland 1/	National Forest Region						1-6
	1	2	3	4	5	6	
	Percent						
Up to 9.9	47	30	8	34	49	39	32
10.0 - 19.9	26	27	12	28	26	27	24
20.0 - 29.9	17	25	14	25	12	19	20
30.0 - 39.9	7	16	13	11	4	11	11
40.0 - 49.9	2	2	13	2	5	2	4
50.0 - 59.9	1	*	14	*	2	1	2
60.0 and over	--	*	26	*	2	1	7
Total	100	100	100	100	100	100	100

1/ Dependency is the proportion of the total herd annual feed requirement furnished by national forest rangeland. Based on data in Table 9.

* Less than .5 percent was rounded to zero.

Table 7--Return above cash cost per cow for high dependency Federal
rangeland permittees

Geographical area : Dependency :		Return above cash costs per cow				
and	on Federal	\$2.00	\$4.00	\$6.00	\$8.00	\$10.00
herd size group	rangeland	Fee	Fee	Fee	Fee	Fee
		<u>Percent</u>	<u>Dollars/cow</u>			
Prescott National Forest:						
up to 199 cows	86	62.19	36.51	10.84	1/	1/
200-499 cows	70	14.56	1/	1/	T/	T/
500 or more cows	51	11.09	.49	T/	T/	T/
Schell Nevada BLM Resource area:						
up to 349 cows	36	62.69	52.17	41.65	31.12	1/
350-799 cows	55	75.00	58.60	42.20	25.80	T/
800 or more cows	29	117.21	108.81	100.41	92.01	83.62
Gila National Forest:						
up to 99 cows	80	44.67	1/	1/	1/	1/
100-399 cows	75	12.16	T/	T/	T/	T/
400 or more cows	36	22.71	11.62	.52	T/	T/
Ashley National Forest:						
up to 99 cows	21	58.48	52.46	46.44	40.42	34.40
100-399 cows	24	34.96	28.18	21.39	14.61	7.88
400 or more cows	21	31.85	24.43	17.01	9.59	2.89

1/ Grazing on Federal rangeland was eliminated due to increases in grazing fees.

cause federal rangeland to go unused. Reductions in herd size also occur to the extent that most of these high dependency businesses would be terminated (Tables B1-B13).

Size of herd

Livestock enterprises that depend on federal rangeland for feed vary in size from a few head to several thousand animals. Cattle permittees were grouped by herd size for the statistics summarized in Table 8. (There was not enough information for comparable data on sheep). In most geographical areas small herds were comprised of 0-99 cows, medium herds 100-499 cows and large herds 500 or more cows. Some deviation from these size groupings occurred in areas where there were few herds of less than 100 cows or a significant number of herds were near the bottom or top of the size classes.

The data indicate that the majority of permittees have herds of less than 500 cows. However, over one-half of the cows owned by permittees are in large herds. There is also a tendency for large herds to be less dependent on federal rangeland than smaller herds. Variations in dependency among herd sizes for different forest service regions are shown in Table 9. In all regions there is a higher proportion of large herds with less than 10 percent dependency on forest grazing than either medium or small herds. Although Table 9 data is just for forest grazing, the conclusions are also applicable to the total federal rangeland use of these permittees. National Forest permittees with large herds tend to depend on BLM grazing about the same as permittees with smaller herds (Table 10).

There are economies of size in livestock production which can affect a permittee's ability to assimilate fee increases. Enterprise costs and returns for different sizes of cattle and sheep herds prepared by the Economic

Table 8--Distribution of permittees, beef cows, and dependency on Federal rangeland based on herd size ^{1/}

	Forest Service	Bureau of Land Management
	<u>Percent</u>	
Permittees:		
Small herds	38	38
Medium herds	44	42
Large herds	18	20
All herds	100	100
Total beef cows in herd ^{2/}		
Small herds	7	7
Medium herds	37	33
Large herds	56	60
All herds	100	100
Dependency on federal rangeland ^{3/}		
Small herds	33	35
Medium herds	27	31
Large herds	21	27
All herds	24	29

^{1/} Small, medium, and large herds generally have 0-99 cows, 100-499 cows, and 500 or more cows respectively. However, size groups deviated from this on individual National Forests and Bureau of Land Management resource areas.

^{2/} Includes all beef cows in the herd, not just those grazing on federal rangeland.

^{3/} Dependency is the proportion of the total herd annual feed requirement furnished by Federal rangeland.

Table 9--Distribution of beef cow permittees based on dependency on National Forest rangeland by region and herd size ^{1/}

Region and herd size	Dependency on National Forest rangeland ^{2/}							Total
	Up to 9.9	10.0-19.9	20.0-29.9	30.0-39.9	40.0-49.9	50.0-59.9	60.0- and over	
	Percent							
Region 1:								
Small	22	29	28	14	5	2	--	100
Medium	47	28	16	7	2	*	--	100
Large	78	16	5	1	--	--	--	100
All sizes	47	26	17	7	2	1	--	100
Region 2:								
Small	17	26	30	23	3	*	1	100
Medium	30	28	25	14	2	--	1	100
Large	52	24	15	8	1	--	--	100
All sizes	30	27	25	16	2	*	*	100
Region 3:								
Small	5	12	13	13	13	11	33	100
Medium	8	9	9	5	9	15	45	100
Large	11	6	7	14	7	5	50	100
All sizes	8	12	14	13	13	14	26	100
Region 4:								
Small	20	31	34	12	3	--	--	100
Medium	37	27	24	10	1	*	*	100
Large	51	24	15	9	1	--	*	100
All sizes	34	28	25	11	2	*	*	100
Region 5:								
Small	16	33	24	7	11	7	2	100
Medium	41	27	14	5	5	4	4	100
Large	75	21	3	1	--	--	--	100
All sizes	49	26	12	4	5	2	2	100
Region 6:								
Small	21	25	28	19	4	3	--	100
Medium	35	26	21	13	3	1	1	100
Large	57	29	11	3	*	--	--	100
All sizes	39	27	19	11	2	1	1	100
Regions 1-6:								
Small	15	25	26	15	6	4	9	100
Medium	34	25	20	10	3	2	6	100
Large	57	22	10	6	1	*	4	100
All sizes	32	24	20	11	4	2	7	100

^{1/} Small, medium and large herds generally have 0-99 cows, 100-499 cows, and 500 or more cows respectively. However, size groups deviated from this on individual forests.

^{2/} Dependency is the proportion of the total herd annual feed requirement furnished by National Forest rangeland.

* Less than .5 percent was rounded to zero.

Table 10--Dependency of permittees on Federal rangeland by
by herd size for National Forest Permittees

National Forest Permittee Federal rangeland dependency				
Herd size	Total	FS	BLM	
		Percent		
Small	33	28	5	
Medium	27	20	7	
Large	21	15	6	
All sizes	24	18	6	

Research Service indicate that larger herds usually have lower costs per head and larger returns above cash costs than smaller herds as well as a lower dependency level. This is also illustrated by livestock budgets prepared for permittees using Forest Service and BLM rangeland (Table 11, Tables D1-3 and Tables D7 and D8). This gives the permittees with larger herds more flexibility in diverting additional resources to pay higher grazing fees.

Since larger herds depend less on federal rangeland than medium or small herds and usually have higher returns above cash costs, they should be impacted less by fee increases. Budget data summaries in Table 12 and in Tables D9-D10 support this conclusion. Returns above cash costs as fees increase are reduced much less with large herds than with small herds. The combined impact of herd size and dependency on return above cash costs is shown for individual forests and BLM areas in Tables D9-D10. In most geographical areas this pattern of response occurred. In the few exceptions higher dependencies with large herds resulted in greater fee impacts on return above cash costs.

Enterprise Viability

There is a wide range in profitability among livestock enterprises. Due to location, management or resource availability. Some cattle and sheep businesses are highly profitable while others are struggling to survive. Although there is no current information to estimate a distribution of federal rangeland permittees based on business viability, some historical data will illustrate the situation. A sample of western sheep businesses were grouped on the basis of profitability during the 1974 production year for different subregions of the West (Table 13). It was found that 35 percent did not pay all cash costs that year. Only 53 percent received some return to family labor and only 27 percent yielded a return to land.^{4/} It is likely that the

^{4/} Enterprise Budgets for Western Commercial Sheep Businesses, 1974, Econ. Res., U.S. Dept. of Agr., Bulletin ERS-659, March 1977.

Table 11--Sales, total cash costs, and returns by size of livestock enterprise, 1982

Item	Small			Medium			Large		
	Total sales	Total cash costs	Return above cash costs	Total sales	Total cash costs	Return above cash costs	Total sales	Total cash costs	Return above cash costs
<u>Dollars/cow</u>									
Western beef cow enterprises <u>1/</u>	273.85	225.75	48.10	280.03	227.97	52.06	286.11	199.07	87.04
Beef cow enterprises grazing national forests <u>2/</u>	271.04	189.47	81.57	259.99	191.26	68.73	270.77	174.15	96.62
Beef cow enterprises <u>2/</u> grazing BLM rangeland	260.16	199.53	60.63	254.95	177.44	77.51	246.52	173.60	72.92
<u>Dollars/ewe</u>									
Western sheep enterprises <u>1/</u>	51.63	37.42	14.21	52.33	33.34	18.99	44.47	32.62	11.85

1/ Based on Economic Research Service, U.S. Department of Agriculture Farm Enterprise Data System (FEDS) livestock budgets. See detailed budgets in Tables D1-D3.

2/ Based on unpublished enterprise budgets prepared for the Forest Service and Bureau of Land Management by the Economic Research Service. For a summary of sales, total costs and returns for selected federal rangeland areas see Table D7 and Table D8.

Table 12--Impact of alternative grazing fee levels on return above cash costs of federal rangeland permittees

Grazing fee	Beef cow enterprises with National Forest permits			Beef cow enterprises with Bureau of Land Management permits		
	Small herds	Medium herds	Large herds	Small herds	Medium herds	Large herds
<u>Dollars/cow</u>						
2.00	73.33	67.77	100.18	59.53	76.72	72.86
4.00	63.99	59.52	93.82	49.49	66.40	63.59
6.00	54.65	51.27	87.46	39.45	56.38	54.32
8.00	45.31	43.02	81.10	29.41	46.36	45.05
10.00	35.97	34.77	74.74	19.37	36.36	35.78
<u>Percent of \$2.00 fee</u>						
2.00	100	100	100	100	100	100
4.00	87	88	94	83	87	87
6.00	75	76	87	66	74	75
8.00	62	63	81	49	61	62
10.00	49	51	75	33	48	49

Table 13--Distribution of commercial sheep businesses based on profitability, 1974

Subregion	Sheep businesses with a financial:				
	Loss (did not cover cash costs)	Return above cash costs	Return to operator and family labor 1/	Return to invested capital 2/	Return to land 3/
	<u>Percent</u>				
Northern Plains	31	69	54	34	24
Plains Wheat- Corn	32	68	63	48	40
Texas-New Mexico	33	67	42	29	17
Mountain	42	58	48	29	23
Great Basin	31	69	63	41	31
California- Arizona	40	60	60	52	43
Pacific Coast	34	66	63	35	31
All subregions	35	65	53	35	27

1/ Those making some return to labor above cash costs and depreciation.

2/ Those making some return to capital invested in equipment, livestock, and land above all other costs.

3/ Those making some return on capital invested in land above all other costs.

viability of cattle and sheep businesses could be similarly distributed in 1982. A significant proportion are operating at a loss, others are in a breakeven situation and would be forced into a loss if fees increased significantly.

STATE AND REGIONAL IMPACTS

Aggregate financial impacts of different grazing fee levels are shown in Tables 14-16 and Tables A1-A22. These data are for the 13 states included in the analysis. Increasing fees from \$2.00 to \$10.00 per animal month did not affect gross income from cattle until the \$10.00 level was reached where a 9 percent drop in gross income occurred as some permits went unused. Sheep businesses were able to accommodate all fee increases without reducing gross income. Aggregate returns above cash costs dropped continually as fees were raised. Returns above cash costs and capital replacement responded similarly. This means that fewer resources are available for family living expenses and debt service as fees rise. At a \$10.00 fee, the return above cash costs is 40 percent less and the return above cash costs and capital replacement is 70 percent less than if the fee were \$2.00.

Table 14--Economic impacts of alternative Federal land grazing fees on livestock business in all states - cattle and sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
<u>1,000 dollars, state aggregate</u>					
Gross income	1,134,990	1,134,990	1,134,990	1,134,990	1,043,897
Total cash costs	823,221	857,531	891,872	926,195	857,307
Feed costs	422,803	455,237	487,461	519,688	467,310
Grazing fees	31,985	64,315	94,978	126,229	96,980
Capital replacement	141,612	141,612	141,612	141,612	136,151
Return above cash costs	311,769	277,459	243,118	208,795	186,590
Return above cash costs and capital replacement	170,157	135,847	101,506	67,183	50,439
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	92
Total cash costs	100	104	108	112	104
Feed costs	100	108	115	123	111
Return above cash costs	100	89	78	67	60
Return above cash costs and capital replacement	100	80	60	40	30

1/ Sum of Tables 8 and 9.

2/ The drop in gross income reflects a reduction in herd size at this fee level.

Table 15--Economic impacts of alternative Federal land grazing fees
on livestock business in all states • cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 ^{2/}
1,000 dollars, state aggregate					
Gross income	1,013,506	1,013,506	1,013,506	1,013,506	922,413
Total cash costs	751,088	780,869	810,677	840,470	767,055
Feed costs	394,370	422,542	450,506	478,471	421,831
Grazing fees	27,724	55,448	83,172	110,896	75,673
Capital replacement	128,381	128,381	128,381	128,381	122,920
Return above cash costs	262,418	232,637	202,829	173,036	155,358
Return above cash costs and capital replacement	134,037	104,256	74,448	44,655	32,438
Percent change in aggregate from \$2.00 base fee					
Gross income	100	100	100	100	91
Total cash costs	100	104	108	112	102
Feed costs	100	107	114	121	107
Return above cash costs	100	89	77	66	59
Return above cash costs and capital replacement	100	78	56	33	24

1/ Total cows in ranches that lease Federal grazing rights 3,487,557.

2/ The drop in gross income reflects a reduction in herd size at this fee level.

Table 16--Economic impacts of alternative Federal land grazing fees
on livestock business in all states - sheep ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
1,000 dollars, state aggregate					
Gross income	121,484	121,484	121,484	121,484	121,484
Total cash costs	72,133	76,662	81,195	85,725	90,252
Feed costs	28,433	32,695	36,955	41,217	45,479
Grazing fees	4,261	8,867	11,806	15,333	21,307
Capital replacement	13,231	13,231	13,231	13,231	13,231
Return above cash costs	49,351	44,822	40,289	35,759	31,232
Return above cash costs and capital replacement	36,120	31,591	27,058	22,528	18,001
Percent change in aggregate from \$2.00 base fee					
Gross income	100	100	100	100	100
Total cash costs	100	106	113	119	125
Feed costs	100	115	130	145	160
Return above cash costs	100	91	82	72	63
Return above cash costs and capital replacement	100	87	75	62	50

^{1/} Total sheep in ranches that lease Federal grazing rights 2,101,121.

Table A1--Economic impacts of alternative federal land grazing fees
on livestock business in Arizona - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	<u>Dollars/cow</u>				
Gross income	211.07	211.07	211.07	211.07	211.07
Total cash costs	130.42	149.99	169.56	189.13	223.07
Feed costs	38.81	56.97	75.13	93.29	32.01
Grazing fees	18.16	36.32	54.48	72.64	--
Capital replacement	36.01	36.01	36.01	36.01	66.24
Return above cash costs	80.65	61.08	41.51	21.94	-12.00
Return above cash costs and and capital replacement	44.64	25.07	5.50	-14.07	-54.24
	<u>1,000 dollars, state aggregate</u>				
Gross income	36,785	36,785	36,785	36,785	14,714
Total cash costs	22,730	26,140	29,551	32,962	15,551
Feed costs	6,764	9,929	13,094	16,259	2,231
Grazing fees	3,165	6,330	9,495	12,660	--
Capital replacement	6,276	6,276	6,276	6,276	4,618
Return above cash costs	14,056	10,645	7,234	3,824	-837
Return above cash costs and capital replacement	7,780	4,369	958	-2,452	-3,781
	<u>Percent change in aggregate from \$2.00 base fee</u>				
Gross income	100	100	100	100	40
Total cash costs	100	115	130	145	68
Feed costs	100	147	193	240	33
Return above cash costs	100	76	51	27	--
Return above cash costs and capital replacement	100	56	12	--	--

1/ Average cow dependency on federal grazing lands for annual feed supply, 60 percent. Total cows in ranches that lease federal grazing rights 174,280.

2/ A grazing fee of \$10.00 was required to reduce herd size, which dropped by 60 percent.

Table A2--Economic impacts of alternative federal land grazing fees
on livestock business in California - cattle 1/

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Item	Grazing fee					2/
	2.00	4.00	6.00	8.00	10.00	
	Dollars/cow					
Gross income	252.18	252.18	252.18	252.18	252.18	
Total cash costs	205.21	209.64	214.07	218.50	222.93	
Feed costs	114.93	119.05	123.17	127.29	131.41	
Grazing fees	4.12	8.24	12.36	16.48	20.60	
Capital replacement	26.85	26.85	26.85	26.85	26.85	
Return above cash costs	46.97	42.54	38.11	33.68	29.25	
Return above cash costs and and capital replacement	20.12	15.69	11.26	6.83	2.40	
<u>1,000 dollars, state aggregate</u>						
Gross income	82,506	82,506	82,506	82,506	82,506	
Total cash costs	67,139	68,588	70,038	71,487	72,936	
Feed costs	37,602	38,950	40,298	41,646	42,994	
Grazing fees	1,348	2,696	4,044	5,392	6,740	
Capital replacement	8,785	8,785	8,785	8,785	8,785	
Return above cash costs	15,367	13,918	12,468	11,019	9,570	
Return above cash costs and capital replacement	6,583	5,133	3,684	2,235	785	
<u>Percent change in aggregate from \$2.00 base fee</u>						
Gross income	100	100	100	100	100	
Total cash costs	100	102	104	106	109	
Feed costs	100	104	107	111	114	
Return above cash costs	100	91	81	72	62	
Return above cash costs and capital replacement	100	78	56	34	12	

1/ Average cow dependency on federal grazing lands for annual feed supply, 15 percent. Total cows in ranches that lease federal grazing rights 327,172.

2/ A grazing fee of \$12.00 was required to reduce herd size, which dropped by 15 percent.

Table A3--Economic impacts of alternative federal land grazing fees
on livestock business in Colorado - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/cow				
Gross income	288.85	288.85	288.85	288.85	288.85
Total cash costs	215.96	223.62	231.28	238.94	246.60
Feed costs	117.51	124.62	131.73	138.84	145.95
Grazing fees	7.11	14.22	21.33	28.44	35.55
Capital replacement	36.32	36.32	36.32	36.32	36.32
Return above cash costs	72.89	65.23	57.57	49.91	42.25
Return above cash costs and and capital replacement	36.57	28.91	21.25	13.59	5.93
	1,000 dollars, state aggregate				
Gross income	82,327	82,327	82,327	82,327	82,327
Total cash costs	61,552	63,736	65,919	68,102	70,285
Feed costs	33,492	35,519	37,545	39,572	41,598
Grazing fees	2,026	4,053	6,079	8,106	10,132
Capital replacement	10,352	10,352	10,352	10,352	10,352
Return above cash costs	20,775	18,592	16,408	14,225	12,042
Return above cash costs and capital replacement	10,423	8,240	6,057	3,873	1,690
	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	100
Total cash costs	100	104	107	110	114
Feed costs	100	106	112	118	124
Return above cash costs	100	89	79	68	58
Return above cash costs and capital replacement	100	79	58	37	16

1/ Average cow dependency on federal grazing lands for annual feed supply, 25 percent. Total cows in ranches that lease federal grazing rights 285,018.

2/ A grazing fee of \$16.00 was required to reduce herd size, which dropped by 25 percent.

Table A4--Economic impacts of alternative federal land grazing fees
on livestock business in Idaho - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/cow				
Gross income	246.93	246.93	246.93	246.93	246.93
Total cash costs	203.88	210.62	217.36	224.10	230.84
Feed costs	94.79	101.53	108.27	115.01	121.75
Grazing fees	6.26	12.52	18.78	25.04	31.30
Capital replacement	29.76	29.76	29.76	29.76	29.76
Return above cash costs	43.05	36.31	29.54	22.83	16.09
Return above cash costs and and capital replacement	13.29	6.55	-.19	-6.93	-13.67
	<u>1,000 dollars, state aggregate</u>				
Gross income	122,826	122,826	122,826	122,826	122,826
Total cash costs	101,412	104,765	108,117	111,470	114,823
Feed costs	47,150	50,502	53,855	57,207	60,560
Grazing fees	3,114	6,228	9,341	12,455	15,569
Capital replacement	14,803	14,803	14,803	14,803	14,803
Return above cash costs	21,414	18,061	14,708	11,356	8,003
Return above cash costs and capital replacement	6,610	3,258	-94	-3,447	-6,800
	<u>Percent change in aggregate from \$2.00 base fee</u>				
Gross income	100	100	100	100	100
Total cash costs	100	103	107	110	113
Feed costs	100	107	114	121	128
Return above cash costs	100	84	69	53	37
Return above cash costs and capital replacement	100	49	1	52	103

1/ Average cow dependency on federal grazing lands for annual feed supply, 23 percent. Total cows in ranches that lease federal grazing rights 497,412.

2/ A grazing fee of \$12.00 was required to reduce herd size, which dropped by 22 percent.

Table A5--Economic impacts of alternative federal land grazing fees on livestock business in Montana - cattle ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 ^{2/}
	Dollars/cow				
Gross income	275.88	275.88	275.88	275.88	275.88
Total cash costs	199.53	202.85	206.17	209.49	212.81
Feed costs	131.07	134.15	137.23	140.31	143.39
Grazing fees	3.08	6.16	9.24	12.32	15.40
Capital replacement	30.91	30.91	30.91	30.91	30.91
Return above cash costs	76.35	73.03	69.71	66.39	63.07
Return above cash costs and capital replacement	45.44	42.12	38.80	35.48	32.16
	1,000 dollars, state aggregate				
Gross income	242,619	242,619	242,619	242,619	242,619
Total cash costs	175,474	178,394	181,314	184,233	187,153
Feed costs	115,268	117,976	120,685	123,393	126,102
Grazing fees	2,709	5,417	8,126	10,835	13,543
Capital replacement	27,183	27,183	27,183	27,183	27,183
Return above cash costs	67,145	64,225	61,306	58,386	55,466
Return above cash costs and capital replacement	39,962	37,042	34,122	31,202	28,283
	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	100
Total cash costs	100	102	103	104	107
Feed costs	100	102	105	107	109
Return above cash costs	100	96	91	87	83
Return above cash costs and capital replacement	100	93	85	78	71

^{1/} Average cow dependency on federal grazing lands for annual feed supply, 11 percent. Total cows in ranches that lease federal grazing rights ... 879,437.

^{2/} A grazing fee of \$12.00 was required to reduce herd size, which dropped by 11 percent.

Table A6--Economic impacts of alternative federal land grazing fees on livestock business in Nebraska - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 2/
	<u>Dollars/cow</u>				
Gross income	305.03	305.03	305.03	305.03	305.03
Total cash costs	188.55	192.08	195.62	199.15	202.68
Feed costs	96.22	99.47	102.73	105.98	109.23
Grazing fees	3.25	6.51	9.76	13.01	16.27
Capital replacement	25.18	25.18	25.18	25.18	25.18
Return above cash costs	116.48	112.95	109.41	105.88	102.35
Return above cash costs and and capital replacement	91.30	87.77	84.23	80.70	77.17
	<u>1,000 dollars, state aggregate</u>				
Gross income	19,070	19,070	19,070	19,070	19,070
Total cash costs	11,788	12,008	12,230	12,450	12,671
Feed costs	6,015	6,219	6,422	6,626	6,829
Grazing fees	203	1,407	610	813	1,017
Capital replacement	1,574	1,574	1,574	1,574	1,574
Return above cash costs	7,282	7,061	6,840	6,619	6,399
Return above cash costs and capital replacement	5,708	5,487	5,266	5,045	4,824
	<u>Percent change in aggregate from \$2.00 base fee</u>				
Gross income	100	100	100	100	100
Total cash costs	100	102	104	106	107
Feed costs	100	103	107	110	114
Return above cash costs	100	97	94	91	88
Return above cash costs and capital replacement	100	96	92	88	85
Aggregate cow herd	62,517	62,517	62,517	62,517	62,517

1/ Average cow dependency on federal grazing lands for annual feed supply, 13 percent. Total cows in ranches that lease federal grazing rights 62,517.

2/ A grazing fee of \$18.00 was required to reduce herd size, which dropped by 13 percent.

Table A7--Economic impacts of alternative federal land grazing fees
on livestock business in Nevada - cattle ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 ^{2/}
	Dollars/cow				
Gross income	214.79	214.79	214.79	214.79	214.79
Total cash costs	180.36	193.19	206.02	218.85	189.21
Feed costs	88.03	99.86	111.69	123.52	76.57
Grazing fees	11.83	23.66	35.49	47.32	--
Capital replacement	26.30	26.30	26.30	26.30	34.74
Return above cash costs	34.43	21.60	8.77	-4.06	25.58
Return above cash costs and and capital replacement	8.13	-4.70	-17.53	-30.36	-9.16
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	1,000 dollars, state aggregate				
Gross income	62,421	62,421	62,421	62,421	39,949
Total cash costs	52,415	56,144	59,872	63,601	35,192
Feed costs	25,583	29,021	32,459	35,896	14,241
Grazing fees	3,438	6,876	10,314	13,752	--
Capital replacement	7,643	7,643	7,643	7,643	6,461
Return above cash costs	10,006	6,277	2,549	-1,180	4,758
Return above cash costs and capital replacement	2,363	-1,366	-5,094	-8,823	-1,704
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	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	64
Total cash costs	100	107	114	121	67
Feed costs	100	113	127	140	56
Return above cash costs	100	63	25	12	48
Return above cash costs and capital replacement	100	--	--	--	--

^{1/} Average cow dependency on federal grazing lands for annual feed supply, 36 percent. Total cows in ranches that lease federal grazing rights 290,613.

^{2/} A grazing fee of \$10.00 was required to reduce herd size, which dropped by 36 percent.

Table A8--Economic impacts of alternative federal land grazing fees on livestock business in New Mexico - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/cow				
Gross income	237.50	237.50	237.50	237.50	237.50
Total cash costs	145.26	159.43	173.60	187.77	171.10
Feed costs	58.61	71.88	85.15	98.42	55.77
Grazing fees	13.27	26.54	39.81	53.08	--
Capital replacement	36.56	36.56	36.56	36.56	53.62
Return above cash costs	92.24	78.07	63.90	49.73	66.40
Return above cash costs and and capital replacement	55.68	41.51	27.34	13.17	12.78
<u>1,000 dollars, state aggregate</u>					
Gross income	68,947	68,947	68,947	68,947	38,610
Total cash costs	42,170	46,283	50,397	54,510	27,816
Feed costs	17,015	20,867	24,719	28,572	9,067
Grazing fees	3,852	7,705	11,557	15,409	--
Capital replacement	10,613	10,613	10,613	10,613	8,717
Return above cash costs	26,778	22,664	18,550	14,437	10,795
Return above cash costs and capital replacement	16,164	12,051	7,937	3,823	2,078
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	56
Total cash costs	100	110	120	129	66
Feed costs	100	123	145	168	53
Return above cash costs	100	85	128	54	40
Return above cash costs and capital replacement	100	75	49	24	13

1/ Average cow dependency on federal grazing lands for annual feed supply, 44 percent. Total cows in ranches that lease federal grazing rights 290,304.

2/ A grazing fee of \$10.00 was required to reduce herd size, which dropped by 44 percent.

Table A9--Economic impacts of alternative federal land grazing fees on livestock business in Oregon - cattle ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 ^{2/}
	Dollars/cow				
Gross income	252.54	252.54	252.54	252.54	252.54
Total cash costs	177.36	184.24	191.12	198.00	204.88
Feed costs	88.33	95.26	101.69	108.12	114.55
Grazing fees	6.43	12.86	19.29	25.72	32.15
Capital replacement	24.95	24.95	24.95	24.95	24.95
Return above cash costs	75.18	68.30	61.42	54.54	47.66
Return above cash costs and and capital replacement	50.23	43.35	36.47	29.59	22.71
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	1,000 dollars, state aggregate				
Gross income	105,378	105,378	105,378	105,378	105,378
Total cash costs	74,007	76,878	79,749	82,620	85,491
Feed costs	36,858	39,749	42,432	45,116	47,799
Grazing fees	2,683	5,366	8,049	10,732	13,415
Capital replacement	10,411	10,411	10,411	10,411	10,411
Return above cash costs	31,371	28,500	25,629	22,758	19,887
Return above cash costs and capital replacement	20,960	18,089	15,218	12,347	9,476
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	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	100
Total cash costs	100	104	108	112	116
Feed costs	100	108	115	122	130
Return above cash costs	100	91	82	73	63
Return above cash costs and capital replacement	100	86	73	59	45

^{1/} Average cow dependency on federal grazing lands for annual feed supply, 23 percent. Total cows in ranches that lease federal grazing rights 417,273.

^{2/} A grazing fee of \$14.00 was required to reduce herd size, which dropped by 23 percent.

Table A10--Economic impacts of alternative federal land grazing fees
on livestock business in South Dakota - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 2/
	Dollars/cow				
Gross income	228.73	228.73	228.73	228.73	228.73
Total cash costs	196.18	199.52	203.27	206.81	210.36
Feed costs	97.57	99.82	103.07	106.32	109.57
Grazing fees	3.25	6.50	9.75	13.00	16.25
Capital replacement	44.16	44.16	44.16	44.16	44.16
Return above cash costs	32.55	29.21	25.46	21.92	18.37
Return above cash costs and and capital replacement	-11.61	-14.95	-18.70	-22.24	-25.79
	1,000 dollars, state aggregate				
Gross income	14,086	14,086	14,086	14,086	14,086
Total cash costs	12,082	12,287	12,518	12,736	12,955
Feed costs	5,947	6,147	6,348	6,548	6,748
Grazing fees	200	400	600	801	1,001
Capital replacement	2,720	2,720	2,720	2,720	2,720
Return above cash costs	2,005	1,799	1,568	1,350	1,131
Return above cash costs and capital replacement	-715	-921	-1,152	-1,370	-1,588
	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	100
Total cash costs	100	102	104	105	107
Feed costs	100	103	107	110	113
Return above cash costs	100	90	78	67	56
Return above cash costs and capital replacement	100	129	161	192	222

1/ Average cow dependency on federal grazing lands for annual feed supply, 12 percent. Total cows in ranches that lease federal grazing rights 61,585.

2/ A grazing fee of \$14.00 was required to reduce herd size, which dropped by 13 percent.

Table All-Economic impacts of alternative federal land grazing fees
on livestock business in Utah - cattle ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 ^{2/}
	Dollars/cow				
Gross income	220.36	220.36	220.36	220.36	220.36
Total cash costs	183.70	194.57	205.44	216.31	207.20
Feed costs	83.73	93.89	104.05	114.21	52.56
Grazing fees	10.16	20.32	30.48	40.64	--
Capital replacement	39.15	39.15	39.15	39.15	54.93
Return above cash costs	36.66	25.79	14.92	4.05	13.16
Return above cash costs and and capital replacement	-2.49	-13.36	-24.23	-35.10	-41.77
	1,000 dollars, state aggregate				
Gross income	46,322	46,322	46,322	46,322	30,109
Total cash costs	38,616	40,901	43,186	45,470	28,311
Feed costs	17,601	19,737	21,872	24,008	7,182
Grazing fees	2,135	4,272	6,407	8,543	--
Capital replacement	8,230	8,230	8,230	8,230	7,505
Return above cash costs	7,706	5,421	3,136	85	1,798
Return above cash costs and capital replacement	-523	-2,808	-5,093	-7,378	-5,707
	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	65
Total cash costs	100	106	112	118	73
Feed costs	100	112	124	136	41
Return above cash costs	100	70	41	11	23
Return above cash costs and capital replacement	--	--	--	--	--

^{1/} Average cow dependency on federal grazing lands for annual feed supply, 35 percent. Total cows in ranches that lease federal grazing rights 210,210.

^{2/} A grazing fee of \$10.00 was required to reduce herd size, which dropped by 35 percent.

Table A12--Economic impacts of alternative federal land grazing fees
on livestock business in Washington - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/cow				
Gross income	283.64	283.64	283.64	283.64	283.64
Total cash costs	208.79	212.75	216.71	220.67	224.63
Feed costs	100.60	104.25	107.90	111.55	115.20
Grazing fees	3.65	7.30	10.95	14.60	18.25
Capital replacement	30.65	30.65	30.65	30.65	30.65
Return above cash costs	74.85	70.89	66.93	62.97	59.01
Return above cash costs and and capital replacement	44.20	40.24	36.28	32.32	28.36
<u>1,000 dollars, state aggregate</u>					
Gross income	16,340	16,340	16,340	16,340	16,340
Total cash costs	12,028	12,256	12,484	12,713	12,941
Feed costs	5,796	6,006	6,216	6,426	6,637
Grazing fees	210	420	631	841	1,051
Capital replacement	1,766	1,766	1,766	1,766	1,766
Return above cash costs	4,312	4,084	3,856	3,628	3,400
Return above cash costs and capital replacement	2,545	2,318	2,090	1,862	1,634
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	100
Total cash costs	100	102	104	107	108
Feed costs	100	104	107	111	115
Return above cash costs	100	95	89	84	79
Return above cash costs and capital replacement	100	91	82	73	64

1/ Average cow dependency on federal grazing lands for annual feed supply, 13 percent. Total cows in ranches that lease federal grazing rights 57,609.

2/ A grazing fee of \$14.00 was required to reduce herd size, which dropped by 14 percent.

Table A13--Economic impacts of alternative federal land grazing fees
on livestock business in Wyoming - cattle 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	<u>Dollars/cow</u>				
Gross income	263.89	263.89	263.89	263.89	263.89
Total cash costs	184.63	191.15	197.67	204.19	210.71
Feed costs	91.02	97.14	103.26	109.38	115.50
Grazing fees	6.12	12.24	18.36	24.48	30.60
Capital replacement	41.77	41.77	41.77	41.77	41.77
Return above cash costs	79.26	72.74	66.22	59.70	53.18
Return above cash costs and and capital replacement	37.49	30.97	24.45	17.93	11.41
<u>1,000 dollars, state aggregate</u>					
Gross income	113,879	113,879	113,879	113,879	113,879
Total cash costs	79,675	82,489	85,302	88,116	90,930
Feed costs	39,279	41,920	44,561	47,202	49,843
Grazing fees	2,641	5,282	7,923	10,564	13,205
Capital replacement	18,025	18,025	18,025	18,025	18,025
Return above cash costs	34,204	31,390	28,576	25,763	22,949
Return above cash costs and capital replacement	16,178	13,365	10,551	7,737	4,924
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	100
Total cash costs	100	104	107	111	114
Feed costs	100	107	113	120	127
Return above cash costs	100	92	84	75	67
Return above cash costs and capital replacement	100	83	65	48	30

1/ Average cow dependency on federal grazing lands for annual feed supply, 23 percent. Total cows in ranches that lease federal grazing rights 431,539.

2/ A grazing fee of \$12.00 was required to reduce herd size, which dropped by 23 percent.

Table A14--Economic impacts of alternative federal land grazing fees on livestock business in California - sheep ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 ^{2/}
	Dollars/ewe				
Gross income	50.18	50.18	50.18	50.18	50.18
Total cash costs	34.35	35.51	36.67	37.83	38.99
Feed costs	10.39	11.48	12.57	13.66	14.75
Grazing fees	1.09	2.18	3.27	4.36	5.45
Capital replacement	11.28	11.28	11.28	11.28	11.28
Return above cash costs	15.83	14.67	13.51	12.35	11.19
Return above cash costs and and capital replacement	4.55	3.39	2.23	1.07	-.09
	1,000 dollars, state aggregate				
Gross income	7,370	7,370	7,370	7,370	7,370
Total cash costs	5,045	5,215	5,386	5,556	5,726
Feed costs	1,526	1,686	1,846	2,006	2,166
Grazing fees	160	320	480	640	800
Capital replacement	1,657	1,657	1,657	1,657	1,657
Return above cash costs	2,325	2,155	1,984	1,814	1,644
Return above cash costs and capital replacement	668	498	328	157	-13
	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	100
Total cash costs	100	103	107	110	114
Feed costs	100	110	121	131	142
Return above cash costs	100	93	85	78	75
Return above cash costs and capital replacement	100	75	49	24	2

^{1/} Average sheep dependency on federal grazing lands for annual feed supply, 24 percent. Total sheep in ranches that lease federal grazing rights 146,872.

^{2/} A grazing fee of \$14.00 was required to reduce herd size, which dropped by 24 percent.

Table A15--Economic impacts of alternative federal land grazing fees
on livestock business in Colorado - sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 2/
	<u>Dollars/ewe</u>				
Gross income	60.53	60.53	60.53	60.53	60.53
Total cash costs	36.04	37.83	39.62	41.41	43.20
Feed costs	18.95	20.65	22.35	24.05	25.75
Grazing fees	1.70	3.40	5.10	6.80	8.50
Capital replacement	4.96	4.96	4.96	4.96	4.96
Return above cash costs	24.49	22.70	20.91	19.12	17.33
Return above cash costs and and capital replacement	19.53	17.74	15.95	14.16	12.37
	<u>1,000 dollars, state aggregate</u>				
Gross income	18,858	18,858	18,858	18,858	18,858
Total cash costs	11,228	11,786	12,344	12,902	13,459
Feed costs	5,904	6,434	6,963	7,493	8,022
Grazing fees	530	1,059	1,589	2,119	2,648
Capital replacement	1,545	1,545	1,545	1,545	1,545
Return above cash costs	7,630	7,072	6,515	5,957	5,399
Return above cash costs and capital replacement	6,085	5,527	4,969	4,412	3,854
	<u>Percent change in aggregate from \$2.00 base fee</u>				
Gross income	100	100	100	100	100
Total cash costs	100	105	110	115	120
Feed costs	100	109	118	127	136
Return above cash costs	100	93	85	78	71
Return above cash costs and capital replacement	100	91	82	73	63

1/ Average sheep dependency on federal grazing lands for annual feed supply, 37 percent. Total sheep in ranches that lease federal grazing rights 311,555.

2/ A grazing fee of \$16.00 was required to reduce herd size, which dropped by 37 percent.

Table A16--Economic impacts of alternative federal land grazing fees on livestock business in Idaho - sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/ewe				
Gross income	63.07	63.07	63.07	63.07	63.07
Total cash costs	31.81	33.59	35.37	37.15	38.93
Feed costs	13.31	14.98	16.65	18.32	19.99
Grazing fees	1.67	3.34	2.79	2.79	8.35
Capital replacement	5.08	5.08	5.08	5.08	5.08
Return above cash costs	31.26	29.48	27.70	25.92	24.14
Return above cash costs and and capital replacement	26.18	24.40	22.62	20.84	19.06
<u>1,000 dollars, state aggregate</u>					
Gross income	27,770	27,770	27,770	27,770	27,770
Total cash costs	14,006	14,790	15,574	16,358	17,141
Feed costs	5,861	6,596	7,331	8,066	8,802
Grazing fees	735	1,471	1,228	1,228	3,677
Capital replacement	2,237	2,237	2,237	2,237	2,237
Return above cash costs	13,764	12,980	12,197	11,413	10,629
Return above cash costs and capital replacement	11,527	10,744	9,960	9,176	8,392
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	100
Total cash costs	100	106	111	117	122
Feed costs	100	113	125	138	150
Return above cash costs	100	94	89	83	77
Return above cash costs and capital replacement	100	93	86	80	73

1/ Average sheep dependency on federal grazing lands for annual feed supply, 35 percent. Total sheep in ranches that lease federal grazing rights 440,312.

2/ A grazing fee of \$16.00 was required to reduce herd size, which dropped by 25 percent.

Table A17--Economic impacts of alternative federal land grazing fees
on livestock business in Montana - sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/ewe				
Gross income	56.24	56.24	56.24	56.24	56.24
Total cash costs	34.34	35.96	37.58	39.20	40.82
Feed costs	13.96	15.46	16.96	18.46	19.96
Grazing fees	1.50	3.00	4.50	6.00	7.50
Capital replacement	6.32	6.32	6.32	6.32	6.32
Return above cash costs	21.90	20.28	18.66	17.04	15.42
Return above cash costs and and capital replacement	15.58	13.96	12.34	10.72	9.10
	<u>1,000 dollars, state aggregate</u>				
Gross income	5,840	5,840	5,840	5,840	5,840
Total cash costs	3,566	3,734	3,903	4,071	4,239
Feed costs	1,450	1,606	1,761	1,917	2,073
Grazing fees	156	312	467	623	779
Capital replacement	656	656	656	656	656
Return above cash costs	2,274	2,106	1,938	1,770	1,601
Return above cash costs and capital replacement	1,618	1,450	1,282	1,113	945
	<u>Percent change in aggregate from \$2.00 base fee</u>				
Gross income	100	100	100	100	100
Total cash costs	100	105	109	114	119
Feed costs	100	111	121	132	143
Return above cash costs	100	93	85	78	70
Return above cash costs and capital replacement	100	90	79	69	58

1/ Average sheep dependency on federal grazing lands for annual feed supply, 35 percent. Total sheep in ranches that lease federal grazing rights 103,850.

2/ A grazing fee of \$16.00 was required to reduce herd size, which dropped by 34 percent.

Table A18--Economic impacts of alternative federal land grazing fees
on livestock business in Nevada - sheep 1/

45

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 2/
	Dollars/ewe				
Gross income	52.74	52.74	52.74	52.74	52.74
Total cash costs	26.94	29.43	31.92	34.41	36.90
Feed costs	6.02	8.33	10.64	12.95	15.26
Grazing fees	2.31	4.62	6.93	9.24	11.55
Capital replacement	4.98	4.98	4.98	4.98	4.98
Return above cash costs	25.80	23.31	20.82	18.33	15.84
Return above cash costs and and capital replacement	20.82	18.33	15.84	13.35	10.86
<u>1,000 dollars, state aggregate</u>					
Gross income	9,604	9,604	9,604	9,604	9,604
Total cash costs	4,906	5,359	5,813	6,266	6,720
Feed costs	1,096	1,517	1,938	2,358	2,779
Grazing fees	421	841	1,262	1,683	2,103
Capital replacement	907	907	907	907	907
Return above cash costs	4,698	4,245	3,791	3,338	2,884
Return above cash costs and capital replacement	3,791	3,338	2,884	2,431	1,978
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	100
Total cash costs	100	102	110	119	128
Feed costs	100	138	177	215	253
Return above cash costs	100	90	81	71	61
Return above cash costs and capital replacement	100	88	76	64	52

1/ Average sheep dependency on federal grazing lands for annual feed supply, 43 percent. Total sheep in ranches that lease federal grazing rights 182,101.

2/ A grazing fee of \$14.00 was required to reduce herd size, which dropped by 43 percent.

Table A19 --Economic impacts of alternative federal land grazing fees
on livestock business in New Mexico - sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars, ewe				
Gross income	49.10	49.10	49.10	49.10	49.10
Total cash costs	26.38	28.97	31.56	34.15	36.74
Feed costs	5.61	7.98	10.35	12.72	15.09
Grazing fees	2.37	4.74	7.11	9.48	11.85
Capital replacement	8.54	8.54	8.54	8.54	8.54
Return above cash costs	22.72	20.13	17.54	14.95	12.36
Return above cash costs and and capital replacement	14.18	11.59	9.00	6.41	3.82
	1,000 dollars, state aggregate				
Gross income	7,144	7,144	7,144	7,144	7,144
Total cash costs	3,838	4,215	4,592	4,969	5,345
Feed costs	816	1,161	1,506	1,851	2,196
Grazing fees	345	690	1,034	1,379	1,724
Capital replacement	1,242	1,242	1,242	1,242	1,242
Return above cash costs	3,306	2,929	2,552	2,175	1,798
Return above cash costs and capital replacement	2,063	1,686	1,309	933	556
	Percent change in aggregate from \$2.00 base fee				
Gross income	100	100	100	100	100
Total cash costs	100	110	120	129	139
Feed costs	100	142	184	227	269
Return above cash costs	100	89	77	66	54
Return above cash costs and capital replacement	100	82	63	45	27

1/ Average sheep dependency on federal grazing lands for annual feed supply, 49 percent. Total sheep in ranches that lease federal grazing rights 145,494.

2/ A grazing fee of \$16.00 was required to reduce herd size, which dropped by 49 percent.

Table A20--Economic impacts of alternative federal land grazing fees
on livestock business in Oregon - sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/ewe				
Gross income	60.28	60.28	60.28	60.28	60.28
Total cash costs	44.54	45.86	47.18	48.50	49.82
Feed costs	14.18	15.43	16.68	17.93	19.18
Grazing fees	1.25	2.50	3.75	5.00	6.25
Capital replacement	9.19	9.19	9.19	9.19	9.19
Return above cash costs	15.74	14.42	13.10	11.78	10.46
Return above cash costs and and capital replacement	6.55	5.23	3.91	2.59	1.27
<u>1,000 dollars, state aggregate</u>					
Gross income	4,366	4,366	4,366	4,366	4,366
Total cash costs	3,226	3,321	3,417	3,513	3,608
Feed costs	1,027	1,118	1,208	1,299	1,389
Grazing fees	90	181	272	362	453
Capital replacement	666	666	666	666	666
Return above cash costs	1,140	1,044	949	853	758
Return above cash costs and capital replacement	474	379	283	188	92
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	100
Total cash costs	100	103	106	109	112
Feed costs	100	109	118	126	135
Return above cash costs	100	92	83	75	66
Return above cash costs and capital replacement	100	80	60	40	19

1/ Average sheep dependency on federal grazing lands for annual feed supply, 27 percent. Total sheep in ranches that lease federal grazing rights 72,425.

2/ A grazing fee of \$14.00 was required to reduce herd size, which dropped by 29 percent.

Table A21--Economic impacts of alternative federal land grazing fees
on livestock business in Utah - sheep 1/

Item	Grazing fee					2/
	2.00	4.00	6.00	8.00	10.00	
	Dollars/ewe					
Gross income	58.78	58.78	58.78	58.78	58.78	
Total cash costs	40.11	42.75	45.39	48.03	50.67	
Feed costs	15.00	17.53	20.06	22.59	25.12	
Grazing fees	2.53	5.06	7.59	10.12	12.65	
Capital replacement	6.75	6.75	6.75	6.75	6.75	
Return above cash costs	18.67	16.03	13.39	10.75	8.11	
Return above cash costs and and capital replacement	11.92	9.28	6.64	4.00	1.36	
	1,000 dollars, state aggregate					
Gross income	22,353	22,353	22,353	22,353	22,353	
Total cash costs	15,253	16,257	17,261	18,265	19,269	
Feed costs	5,704	6,666	7,628	8,590	9,553	
Grazing fees	962	1,924	2,886	3,848	4,810	
Capital replacement	2,567	2,567	2,567	2,567	2,567	
Return above cash costs	7,100	6,096	5,092	4,088	3,084	
Return above cash costs and capital replacement	4,533	3,529	2,525	1,521	517	
	Percent change in aggregate from \$2.00 base fee					
Gross income	100	100	100	100	100	
Total cash costs	100	107	113	120	126	
Feed costs	100	117	134	151	167	
Return above cash costs	100	86	72	58	43	
Return above cash costs and capital replacement	100	78	56	34	11	

1/ Average sheep dependency on federal grazing lands for annual feed supply, 47 percent. Total sheep in ranches that lease federal grazing rights 380,278.

2/ A grazing fee of \$14.00 was required to reduce herd size, which dropped by 49 percent.

Table A22--Economic impacts of alternative federal land grazing fees
on livestock business in Wyoming - sheep 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00 <u>2/</u>
	Dollars/ewe				
Gross income	57.11	57.11	57.11	57.11	57.11
Total cash costs	34.76	37.65	40.54	43.43	46.32
Feed costs	15.86	18.57	21.28	23.99	26.70
Grazing fees	2.71	5.42	8.13	10.84	13.55
Capital replacement	5.51	5.51	5.51	5.51	5.51
Return above cash costs	22.35	19.46	16.57	13.68	10.79
Return above cash costs and and capital replacement	16.84	13.95	11.06	8.17	5.28
<u>1,000 dollars, state aggregate</u>					
Gross income	18,179	18,179	18,179	18,179	18,179
Total cash costs	11,065	11,985	12,905	13,825	14,745
Feed costs	5,049	5,911	6,774	7,637	8,499
Grazing fees	862	1,725	2,588	3,451	4,313
Capital replacement	1,754	1,754	1,754	1,754	1,754
Return above cash costs	7,114	6,195	5,402	4,355	3,435
Return above cash costs and capital replacement	5,361	4,441	3,521	2,601	1,681
<u>Percent change in aggregate from \$2.00 base fee</u>					
Gross income	100	100	100	100	100
Total cash costs	100	108	117	125	133
Feed costs	100	117	134	151	168
Return above cash costs	100	87	74	61	48
Return above cash costs and capital replacement	100	62	49	37	24

1/ Average sheep dependency on federal grazing lands for annual feed supply, 29 percent. Total sheep in ranches that lease federal grazing rights 318,323.

2/ A grazing fee of \$12.00 was required to reduce herd size, which dropped by 17 percent.

Table B1--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of up to 199 cows, Prescott National Forest, Arizona 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	Dollars				
Gross income	18,107	18,107	18,107	1,688	<u>3/</u>
Total cash costs	11,391	14,164	16,936	1,691	
Feed costs	5,758	8,531	11,303	293	
Grazing fee	2,592	5,184	7,776	--	
Capital replacement ^{2/}	2,645	2,645	2,645	1,311	
Return above cash costs	6,716	3,943	1,171	-3	
Return above cash costs and capital replacement	4,071	1,298	-1,474	-1,314	
Herd size, head	108	108	108	10	

1/ Average dependency on federal grazing for annual feed supply, 86 percent.

2/ Calculated the same as depreciation but with assets valued at current replacement cost.

3/ No change in costs and returns past the \$8.00 fee level since grazing permits are priced too high to use.

Table B2--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 200-499 cows, Prescott National Forest, Arizona 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	45,515	12,025	<u>3/</u>	<u>3/</u>	<u>3/</u>
Total cash costs	41,394	12,800			
Feed costs	14,846	2,538			
Grazing fee	5,592	--			
Capital replacement ^{2/}	11,161	8,228			
Return above cash costs	4,121	-775			
Return above cash costs and capital replacement	-7,040	-9,003			
Herd size, head	283	75			

- 1/ Average dependency on federal grazing for annual feed supply, 70 percent.
2/ Calculated the same as depreciation but with assets valued at current replacement cost.
3/ No change in costs and returns past the \$4.00 fee level since grazing permits are priced too high to use.

Table B3--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 500 or more cows, Prescott National Forest, Arizona 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	120,561	57,569	<u>3/</u>	<u>3/</u>	<u>3/</u>
Total cash costs	112,243	57,200			
Feed costs	34,228	13,428			
Grazing fee	10,544	--			
Capital replacement ^{2/}	30,414	24,926			
Return above cash costs	8,318	369			
Return above cash costs and capital replacement	-22,096	-24,557			
Herd size, head	750	358			

1/ Average dependency on federal grazing for annual feed supply, 51 percent.

2/ Calculated the same as depreciation but with assets valued at current replacement cost.

3/ No change in costs and returns past the \$4.00 fee level since grazing permits are priced too high to use.

Table B4--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of up to 349 cows, Schell resource area, BLM, Nevada ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	43,948	43,948	43,948	43,948	30,986
Total cash costs	30,657	32,888	35,119	37,350	20,726
Feed costs	11,519	13,750	15,981	18,212	6,613
Grazing fee	2,110	4,220	6,330	8,440	10,550
Capital replacement ^{2/}	7,211	7,211	7,211	7,211	6,525
Return above cash costs	13,291	11,060	8,829	6,598	10,260
Return above cash costs and capital replacement	6,080	3,849	1,618	-613	3,735
Herd size, head	212	212	212	212	149

^{1/} Average dependency on federal grazing for annual feed supply, 36 percent.

^{2/} Calculated the same as depreciation but with assets valued at current replacement cost.

Table B5--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 350-799 cows, Schell resource area, BLM, Nevada ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	Dollars				
Gross income	83,879	83,879	83,879	83,879	38,679
Total cash costs	53,278	59,970	66,662	73,354	28,795
Feed costs	20,515	27,207	33,899	40,591	6,307
Grazing fee	6,328	12,656	18,984	25,312	--
Capital replacement ^{2/}	13,850	13,850	13,850	13,850	11,472
Return above cash costs	30,601	23,909	17,217	10,525	9,884
Return above cash costs and capital replacement	16,751	10,059	3,367	-3,325	-1,588
Herd size, head	408	408	408	408	188

^{1/} Average dependency on federal grazing for annual feed supply, 55 percent.

^{2/} Calculated the same as depreciation but with assets valued at current replacement cost.

Table 86--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 800 or more cows, Schell resource area, BLM, Nevada 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	343,516	343,516	343,516	343,516	343,516
Total cash costs	171,808	184,111	196,414	208,717	221,020
Feed costs	69,321	81,624	93,927	106,230	118,533
Grazing fee	11,510	23,020	34,530	46,040	57,550
Capital replacement ^{2/}	30,643	30,643	30,643	30,643	30,643
Return above cash costs	171,708	159,405	147,102	134,799	122,496
Return above cash costs and capital replacement	141,065	128,762	116,459	104,156	91,853
Herd size, head	1,465	1,465	1,465	1,465	1,465

- 1/ Average dependency on federal grazing for annual feed supply, 29 percent.
2/ Calculated the same as depreciation but with assets valued at current replacement cost.

Table B7--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, sheep herds of all sizes cows, Schell resource area, BLM, Nevada 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	Dollars				
Gross income	188,533	188,533	188,533	188,533	88,987
Total cash costs	83,276	93,575	103,873	114,172	39,945
Feed costs	9,358	19,657	29,955	40,254	<u>3/</u>
Grazing fee	9,358	19,657	29,955	40,254	--
Capital replacement ^{2/}	22,194	22,194	22,194	22,194	20,673
Return above cash costs	105,257	94,958	84,660	74,361	49,042
Return above cash costs and capital replacement	83,063	72,764	62,466	52,167	28,369
Herd size, head	3,562	3,562	3,562	3,562	1,681

- 1/ Average dependency on federal grazing for annual feed supply, 52 percent.
2/ Calculated the same as depreciation but with assets valued at current replacement cost.
3/ Costs of deeded rangeland are included in total cash costs. Cash feed cost consist of only grazing fees.

Table B8--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of up to 99 cows, Gila National Forest, New Mexico 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	7,767	980	<u>3/</u>	<u>3/</u>	<u>3/</u>
Total cash costs	5,712	1,363			
Feed costs	2,272	449			
Grazing fee	1,180	--			
Capital replacement ^{2/}	3,077	2,347			
Return above cash costs	2,055	-383			
Return above cash costs and capital replacement	-1,022	-2,730			
Herd size, head	46	6			

1/ Average dependency on federal grazing for annual feed supply, 80 percent.

2/ Calculated the same as depreciation but with assets valued at current replacement cost.

3/ No change in costs and returns past the \$4.00 fee level.

Table 89--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 100 to 399 cows, Gila National Forest, New Mexico 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	35,192	5,899	<u>3/</u>	<u>3/</u>	<u>3/</u>
Total cash costs	32,153	6,056			
Feed costs	9,678	2,280			
Grazing fee	5,612	--			
Capital replacement ^{2/}	13,884	10,215			
Return above cash costs	3,039	-157			
Return above cash costs and capital replacement	-10,845	-10,372			
Herd size, head	250	42			

1/ Average dependency on federal grazing for annual feed supply, 75 percent.

2/ Calculated the same as depreciation but with assets valued at current replacement cost.

3/ No change in costs and returns past the \$4.00 fee level.

Table B10--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 400 or more cows, Gila National Forest, New Mexico 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	Dollars				
Gross income	196,312	196,312	196,312	126,589	
Total cash costs	168,604	182,138	195,672	127,511	
Feed costs	92,271	104,805	119,339	57,245	
Grazing fee	12,514	25,028	37,542	--	
Capital replacement ^{2/}	43,455	43,455	43,455	36,151	
Return above cash costs	27,708	14,174	640	-922	
Return above cash costs and capital replacement	-15,747	-29,281	-42,815	-37,073	
Herd size, head	1,220	1,220	1,220	787	

^{1/} Average dependency on federal grazing for annual feed supply, 36 percent.

^{2/} Calculated the same as depreciation but with assets valued at current replacement cost.

Table B11--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of up to 99 cows, Ashley National Forest, Utah 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	Dollars				
Gross income	12,671	12,671	12,671	12,671	12,671
Total cash costs	9,630	9,943	10,256	10,569	10,882
Feed costs	5,549	5,862	6,175	6,488	6,801
Grazing fee	284	568	852	1,136	1,420
Capital replacement ^{2/}	1,460	1,460	1,460	1,460	1,460
Return above cash costs	3,041	2,728	2,415	2,102	1,789
Return above cash costs and capital replacement	1,581	1,268	955	642	329
Herd size, head	52	52	52	52	52

1/ Average dependency on federal grazing for annual feed supply, 21 percent.

2/ Calculated the same as depreciation but with assets valued at current replacement cost.

Table B12--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 100 to 399 cows, Ashley National Forest, Utah ^{1/}

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	Dollars				
Gross income	45,394	45,394	45,394	45,394	43,914
Total cash costs	38,821	40,096	41,372	42,647	42,432
Feed costs	20,637	21,912	23,188	24,463	24,248
Grazing fee	1,166	2,332	3,498	4,664	5,613
Capital replacement ^{2/}	6,504	6,504	6,504	6,504	6,449
Return above cash costs	6,573	5,298	4,022	2,747	1,482
Return above cash costs and capital replacement	69	-1,206	-2,482	-3,757	-4,967
Herd size, head	188	188	188	188	181

^{1/} Average dependency on federal grazing for annual feed supply, 24 percent.

^{2/} Calculated the same as depreciation but with assets valued at current replacement cost.

Table B13--Financial impacts on livestock businesses of alternative federal rangeland grazing fees, beef herds of 400 or more cows, Ashley National Forest, Utah 1/

Item	Grazing fee				
	2.00	4.00	6.00	8.00	10.00
	<u>Dollars</u>				
Gross income	202,466	202,466	202,466	202,466	202,466
Total cash costs	176,062	182,214	188,366	194,518	200,067
Feed costs	92,038	98,190	104,342	110,494	116,646
Grazing fee	5,626	11,252	16,878	22,504	28,130
Capital replacement ^{2/}	36,595	36,595	36,595	36,595	36,595
Return above cash costs	26,404	20,252	14,100	7,948	2,399
Return above cash costs and capital replacement	-10,191	-16,343	-22,495	-28,647	-34,196
Herd size, head	829	829	829	829	829

1/ Average dependency on federal grazing for annual feed supply, 21 percent.

2/ Calculated the same as depreciation but with assets valued at current replacement cost.

Table C1--Average beef cow enterprise budget, with Federal Grazing Permits, Arizona, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	544	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	17	--	--	--	--	Other feed	Ton	--	--	--	--	--
Cows culled	Head	59	--	--	--	--	Salt and mineral	Cwt	195.0	--	4.88	952	1.75
Calves born alive	Head	458	--	--	--	--	Veterinary & medicine	Dol	--	--	--	1,960	3.60
Calves lost birth to weaning	Head	27	--	--	--	--	Hired trucking	Dol	--	--	--	1,613	2.93
Steer calves weaned	Head	215	--	--	--	--	Marketing 6/	Dol	--	--	--	1,629	2.99
Sold as weaners	Head	159	--	--	--	--	General farm over-head 7/	Dol	--	--	--	4,817	8.85
Lost after weaning	Head	1	--	--	--	--	Hired labor	Hrs	4,494.5	--	4.36	19,596	36.02
Sold as yearlings	Head	55	--	--	--	--	Fuel and lubricants	Dol	--	--	--	5,246	9.64
Heifer calves weaned	Head	216	--	--	--	--	Repairs	Dol	--	--	--	4,799	8.82
Sold as weaners	Head	99	--	--	--	--	Taxes 8/	Dol	--	--	--	1,686	3.10
Lost after weaning	Head	2	--	--	--	--	Insurance	Dol	--	--	--	2,402	4.42
Sold as yearlings	Head	39	--	--	--	--	Interest on operating capital 9/	Dol	34,275.0	--	.15	5,073	9.33
Kept for herd replacement 2/	Head	76	--	--	--	--	Total cash costs	Dol	--	--	--	70,194	129.03
Sales:							Other costs:						
Steer calves	Head	159	392	65.35	40,731	--	Family labor 10/	Hrs	2,008.4	--	4.36	8,756	16.10
Heifer calves	Head	99	362	53.06	19,016	--	Capital replacement 11/	Dol	--	--	--	19,591	36.01
Yearling steers	Head	55	660	62.05	22,524	--	Interest on investment other than land 12/	Dol	--	--	--	52,029	95.64
Yearling heifers	Head	39	620	54.85	13,263	--	Interest on land 13/	Dol	--	--	--	63,320	116.40
Cull cows	Head	59	873	37.45	19,289	--	Total other costs	Dol	--	--	--	143,696	264.15
Total sales	Head	--	--	--	114,823	211.07	Total all costs	Dol	--	--	--	213,890	393.18
Cash costs:							Return above cash costs:						
Federal grazing fees 3/	AM	4,938.3	--	1.86	9,185	16.88	and family labor	Dol	--	--	--	44,629	82.04
Private pasture lease 4/	AUM	706.3	--	6.26	4,421	8.13	Return to total	Dol	--	--	--	16,282	29.93
Other pasture lease 4/	AUM	--	--	--	--	--	Investment 14/	Dol	--	--	--	-35,747	-65.71
State land lease	AUM	490.4	--	1.02	500	.92	Return to land 15/	Dol	--	--	--	--	--
Irrigated pasture	AUM	--	--	--	--	--							
Hay produced	Ton	34.7	--	37.25	1,293	2.38							
Hay purchased	Ton	20.5	--	59.83	1,227	2.26							
Protein supplement 5/	Ton	16.3	--	232.80	3,795	6.98							
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Feed source:													
National Forest 16/	AM	326.0	320.5	311.3	184.6	206.8	346.9	354.0	355.4	366.0	325.9	320.2	319.3
Bureau of Land Management 16/	AM	125.8	130.4	133.4	95.9	98.1	86.6	86.9	86.5	85.3	84.9	92.0	95.6
Pasture rent/Tease 17/	AUM	16.8	18.4	19.5	23.9	27.9	141.6	175.7	171.2	36.1	30.7	22.0	22.5
State land lease	AUM	9.3	10.3	11.5	13.8	16.0	17.2	17.6	26.7	148.2	110.7	53.0	56.1
Deeded rangeland 17/	AUM	136.6	148.9	164.8	414.0	472.5	220.1	192.4	194.7	186.1	183.7	186.9	189.2
Irrigated pasture 17/	AUM	--	--	--	--	--	--	--	--	--	--	--	--
Crop residue 17/	AUM	1.8	1.9	2.1	2.1	--	--	--	--	--	.6	2.2	2.2
Hay	Ton	15.4	15.5	15.4	8.9	--	--	--	--	--	--	--	--
Grain	Bu	--	--	--	--	--	--	--	--	--	--	--	--
Protein supplement	Ton	3.2	3.9	3.9	3.9	1.4	--	--	--	--	--	--	--

See footnotes at end of Table C12.

Table C2--Average beef cow enterprise budget, with Federal Grazing Permits, California, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	
Production:							Cash costs--Continued							
Bred cows 1/	Head	1,052	--	--	--	--	Grain	Bu	--	--	--	--	--	
Annual cow loss	Head	30	--	--	--	--	Other feed	Ton	--	--	--	--	--	
Cows culled	Head	157	--	--	--	--	Salt and mineral	Cwt	549.5	--	6.69	3,676	3.49	
Calves born alive	Head	899	--	--	--	--	Veterinary & medicine	Dol	--	--	--	5,487	5.22	
Calves lost birth to weaning	Head	45	--	--	--	--	Hired trucking	Dol	--	--	--	3,920	3.73	
Steer calves weaned	Head	427	--	--	--	--	Marketing 6/	Dol	--	--	--	2,413	2.29	
Sold as weaners	Head	222	--	--	--	--	General farm over-head 7/	Dol	--	--	--	8,515	8.09	
Lost after weaning	Head	4	--	--	--	--	Hired labor	Hrs	5,460.0	--	4.82	26,317	25.02	
Sold as yearlings	Head	201	--	--	--	--	Fuel and lubricants	Dol	--	--	--	6,702	6.37	
Heifer calves weaned	Head	427	--	--	--	--	Repairs	Dol	--	--	--	8,139	7.74	
Sold as weaners	Head	111	--	--	--	--	Taxes 8/	Dol	--	--	--	9,851	9.36	
Lost after weaning	Head	2	--	--	--	--	Insurance	Dol	--	--	--	4,608	4.38	
Sold as yearlings	Head	127	--	--	--	--	Interest on operating capital 9/	Dol	103,569	--	.15	15,328	14.57	
Kept for herd replacement 2/	Head	187	--	--	--	--	Total cash costs	Dol	--	--	--	203,526	193.47	
Sales:							Other costs:							
Steer calves	Head	222	426	63.98	60,507	--	Family labor 10/	Hrs	4,036.8	--	4.82	19,457	18.50	
Heifer calves	Head	111	395	53.06	23,264	--	Capital replacement 11/	Dol	--	--	--	28,245	26.85	
Yearling steers	Head	201	629	62.02	78,411	--	Interest on investment other than land 12/	Dol	--	--	--	95,727	91.00	
Yearling heifers	Head	127	593	54.01	40,675	--	Interest on land 13/	Dol	--	--	--	224,674	213.57	
Cull cows	Head	157	992	39.87	62,095	--	Total other costs	Dol	--	--	--	368,103	349.91	
Total sales	Head	--	--	--	264,952	251.86	Total all costs	Dol	--	--	--	571,629	543.37	
Cash costs:							Return above cash costs:							
Federal grazing fees 3/	AM	2,164.8	--	1.86	4,027	3.83	and family labor	Dol	--	--	--	41,969	39.89	
Private pasture lease	AUM	4,330.2	--	9.23	39,968	37.99	Return to total investment 14/	Dol	--	--	--	13,724	13.05	
Other pasture lease 4/	AUM	932.8	--	3.89	3,629	3.45	Return to land 15/	Dol	--	--	--	-82,003	-77.95	
State land lease	AUM	35.6	--	2.20	78	.07								
Irrigated pasture	AUM	374.7	--	4.25	1,592	1.51								
Hay produced	Ton	764.2	--	36.89	28,191	26.80								
Hay purchased	Ton	157.1	--	71.17	11,181	10.63								
Protein supplement 5/	Ton	85.5	--	232.80	19,904	18.92								
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Feed source:														
National Forest 16/	AM	19.7	20.1	29.2	51.0	109.9	164.6	205.9	204.3	173.5	42.0	14.8	19.8	
Bureau of Land Management 16/	AM	34.5	42.0	56.1	127.7	205.6	166.8	127.3	122.4	108.3	48.6	35.4	35.3	
Pasture rent/Tease 17/	AUM	285.5	314.2	368.3	330.6	404.9	424.9	435.9	445.1	478.3	394.0	219.1	229.4	
State land lease	AUM	--	--	--	--	7.4	8.2	8.9	6.6	4.5	--	--	--	
Deeded rangeland 17/	AUM	239.1	296.5	407.8	743.6	894.1	736.0	994.1	1,021.8	998.2	694.3	277.1	263.5	
Irrigated pasture 17/	AUM	--	--	--	48.2	59.7	54.2	65.2	65.9	34.0	25.2	22.3	--	
Crop residue 17/	AUM	--	--	--	--	--	--	--	--	3.6	246.3	522.6	55.6	
Hay	Ton	206.3	216.8	184.3	91.0	5.0	--	--	--	--	--	45.0	172.9	
Other grazing	AUM	28.1	30.3	49.5	71.1	95.3	111.4	105.7	107.2	107.1	96.6	73.1	57.4	
Protein supplement	Ton	19.1	18.9	18.8	7.1	--	--	--	--	--	.5	5.9	15.2	

See footnotes at end of Table C12.

Table C3--Average beef cow enterprise budget, with Federal Grazing Permits, Colorado, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	699	--	--	--	--	Grain	Bu	19.4	--	2.58	50	.07
Annual cow loss	Head	14	--	--	--	--	Water	Ton	--	--	--	--	--
Cows culled	Head	80	--	--	--	--	Salt and mineral	Cwt	253.5	--	4.57	1,158	1.66
Calves born alive	Head	646	--	--	--	--	Veterinary & medicine	Dol	--	--	--	4,099	5.86
Calves lost birth to weaning	Head	26	--	--	--	--	Hired trucking	Dol	--	--	--	2,532	3.62
Steer calves weaned	Head	310	--	--	--	--	Marketing 6/	Dol	--	--	--	1,843	2.64
Sold as weaners	Head	157	--	--	--	--	General farm over-head 7/	Dol	--	--	--	5,319	7.61
Lost after weaning	Head	3	--	--	--	--	Hired labor	Hrs	5,244.2	--	4.22	22,131	31.66
Sold as yearlings	Head	150	--	--	--	--	Fuel and lubricants	Dol	--	--	--	5,801	8.30
Heifer calves weaned	Head	310	--	--	--	--	Repairs	Dol	--	--	--	8,145	11.65
Sold as weaners	Head	101	--	--	--	--	Taxes 8/	Dol	--	--	--	3,545	5.07
Lost after weaning	Head	4	--	--	--	--	Insurance	Dol	--	--	--	3,468	4.96
Sold as yearlings	Head	111	--	--	--	--	Interest on operating capital 9/	Dol	69,782.0	--	.15	10,746	15.37
Kept for herd replacement 2/	Head	94	--	--	--	--	Total cash costs	Dol	--	--	--	150,580	215.42
Sales:							Other costs:						
Steer calves	Head	157	406	67.84	43,243	--	Family labor 10/	Hrs	4,017.0	--	4.22	16,952	24.25
Heifer calves	Head	101	378	59.12	22,571	--	Capital replacement 11/	Dol	--	--	--	25,385	36.32
Yearling steers	Head	150	708	62.62	66,502	--	Interest on investment other than land 12/	Dol	--	--	--	66,381	94.97
Yearling heifers	Head	111	630	59.63	41,699	--	Interest on land 13/	Dol	--	--	--	185,318	265.12
Cull cows	Head	80	964	36.17	27,894	--	Total other costs	Dol	--	--	--	294,036	420.65
Total sales	Head	--	--	--	201,909	288.85	Total all costs	Dol	--	--	--	444,616	636.07
Cash costs:							Return above cash costs:						
Federal grazing fees 3/	AM	2,486.5	--	1.86	4,625	6.62	Return above cash costs and family labor	Dol	--	--	--	51,329	73.43
Private pasture lease	AUM	1,066.4	--	9.04	9,640	13.79	Return to total investment 14/	Dol	--	--	--	34,377	49.18
Other pasture lease 4/	AUM	--	--	--	--	--	Return to land 15/	Dol	--	--	--	8,992	12.86
State land lease	AUM	143.9	--	1.83	263	.38					--	-57,389	-82.10
Irrigated pasture	AUM	765.0	--	4.48	3,427	4.90							
Hay produced	Ton	1,052.0	--	42.80	45,026	64.41							
Hay purchased	Ton	183.4	--	66.00	12,104	17.34							
Protein supplement 5/	Ton	34.5	--	193.00	6,658	9.53							
Feed source:													
National Forest 16/	AM	--	--	--	--	60.3							
Bureau of Land Management 16/	AM	50.7	59.9	56.2	52.7	163.9							
Pasture rent/Lease 17/	AUM	12.3	16.5	24.0	30.4	147.1							
State land lease	AUM	1.5	1.6	1.8	2.4	19.2							
Deeded rangeland 17/	AUM	34.5	49.9	67.2	149.1	454.9							
Irrigated pasture 17/	AUM	--	--	--	--	97.4							
Crop residue 17/	AUM	--	--	--	--	--							
Hay	Ton	232.1	251.5	266.2	260.1	59.1							
Grain	Bu	2.8	3.0	3.3	2.8	3.0							
Protein supplement	Ton	6.1	6.1	6.1	5.9	3.6							

See footnotes at end of Table C12.

Table C3A--Average beef cow enterprise budget, with Federal Grazing Permits, Idaho, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	674	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	29	--	--	--	--	Water	Ton	--	--	--	982	1.46
Cows culled	Head	87	--	--	--	--	Salt and mineral	Cwt	246.5	--	4.33	1,067	1.58
Calves born alive	Head	588	--	--	--	--	Veterinary & medicine	Dol	--	--	--	5,650	8.38
Calves lost birth to weaning	Head	35	--	--	--	--	Hired trucking	Dol	--	--	--	1,995	2.96
Steer calves weaned	Head	276	--	--	--	--	Marketing 6/	Dol	--	--	--	2,063	3.06
Sold as weaners	Head	140	--	--	--	--	General farm over-						
Lost after weaning	Head	3	--	--	--	--	head 7/	Dol	--	--	--	8,912	13.22
Sold as yearlings	Head	133	--	--	--	--	Hired labor	Hrs	4,724.9	--	4.35	20,555	30.50
Heifer calves weaned	Head	277	--	--	--	--	Fuel and lubricants	Dol	--	--	--	7,802	11.58
Sold as weaners	Head	76	--	--	--	--	Repairs	Dol	--	--	--	7,422	11.01
Lost after weaning	Head	2	--	--	--	--	Taxes 8/	Dol	--	--	--	4,166	6.18
Sold as yearlings	Head	83	--	--	--	--	Insurance	Dol	--	--	--	3,137	4.65
Kept for herd replacement 2/	Head	116	--	--	--	--	Interest on operating capital 9/	Dol	85,905.0	--	.15	9,754	14.47
							Total cash costs	Dol	--	--	--	137,097	203.41
Sales:							Other costs:						
Steer calves	Head	140	408	65.67	37,511	--	Family labor 10/	Hrs	3,979.3	--	4.35	17,310	25.68
Heifer calves	Head	76	376	54.22	15,494	--	Capital replace-						
Yearling steers	Head	133	652	63.50	55,065	--	ment 11/	Dol	--	--	--	20,060	29.76
Yearling heifers	Head	83	631	55.96	29,308	--	Interest on Invest-						
Cull cows	Head	87	931	35.87	29,054	--	ment other than						
Total sales	Head				166,432	246.93	land 12/	Dol	--	--	--	63,595	94.35
Cash costs:							Interest on land 13/	Dol	--	--	--	169,500	251.48
Federal grazing fees 3/	AM	2,109.9	--	1.86	3,924	5.82	Total other costs	Dol	--	--	--	270,465	401.28
Private pasture lease	AUM	1,057.5	--	7.98	8,439	12.52	Total all costs	Dol	--	--	--	407,562	604.69
Other pasture lease 4/	AUM	--	--	--	--	--	Return above cash costs	Dol	--	--	--	29,335	43.52
State land lease	AUM	298.8	--	4.72	1,410	2.09	Return above cash costs and family labor	Dol	--	--	--	12,025	17.84
Irrigated pasture	AUM	470.9	--	4.51	2,124	3.15	Return to total investment 14/	Dol	--	--	--	-8,035	-11.92
Hay produced	Ton	830.3	--	32.78	27,217	40.38	Return to land 15/	Dol	--	--	--	-71,630	-106.28
Hay purchased	Ton	316.9	--	53.17	16,850	25.00							
Protein supplement 5/	Ton	15.9	--	228.20	3,628	5.38							
Feed source:													
National Forest 16/	AM	2.0	2.0	2.1	2.1	10.6							
Bureau of Land Management 16/	AM	33.5	22.9	36.1	144.8	210.5							
Pasture rent/lease 17/	AUM	3.6	3.9	5.1	108.0	174.7							
State land lease	AUM	--	--	24.4	29.0	44.0							
Deeded rangeland 17/	AUM	16.6	38.9	123.6	261.1	624.5							
Irrigated pasture 17/	AUM	--	--	--	2.8	22.7							
Crop residue 17/	AUM	--	--	--	--	--							
Hay	Ton	245.5	262.0	250.0	163.6	17.6							
Grain	Bu	--	--	--	--	--							
Protein supplement	Ton	4.3	4.4	3.4	.3	--							

See footnotes at end of Table C12.



Table C4--Average beef cow enterprise budget, with Federal Grazing Permits, Montana, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:						
Bred cows 1/	Head	793	--	--	--	--
Annual cow loss	Head	26	--	--	--	--
Cows culled	Head	122	--	--	--	--
Calves born alive	Head	726	--	--	--	--
Calves lost birth to weaning	Head	33	--	--	--	--
Steer calves weaned	Head	346	--	--	--	--
Sold as weaners	Head	236	--	--	--	--
Lost after weaning	Head	2	--	--	--	--
Sold as yearlings	Head	108	--	--	--	--
Heifer calves weaned	Head	347	--	--	--	--
Sold as weaners	Head	130	--	--	--	--
Lost after weaning	Head	2	--	--	--	--
Sold as yearlings	Head	67	--	--	--	--
Kept for herd replacement 2/	Head	148	--	--	--	--
Cash costs--Continued						
Grain	Bu	63.8	--	2.13	136	.17
Other feed	Ton	--	--	--	--	--
Salt and mineral	Cwt	280.5	--	4.27	1,197	1.51
Veterinary & medicine	Dol	--	--	--	4,859	6.13
Hired trucking	Dol	--	--	--	2,503	3.16
Marketing 6/	Dol	--	--	--	2,213	2.79
General farm over-head 7/	Dol	--	--	--	14,519	18.31
Hired labor	Hrs	5,291.0	--	4.13	21,852	27.56
Fuel and lubricants	Dol	--	--	--	6,796	8.57
Repairs	Dol	--	--	--	8,227	10.37
Taxes 8/	Dol	--	--	--	5,471	6.90
Insurance	Dol	--	--	--	3,966	5.00
Interest on operating capital 9/	Dol	78,877.0	--	.15	11,674	14.72
Total cash costs	Dol	--	--	--	158,048	199.30
Other costs:						
Family labor 10/	Hrs	3,849.2	--	4.13	15,897	20.05
Capital replacement 11/	Dol	--	--	--	24,508	30.91
Interest on investment other than land 12/	Dol	--	--	--	73,435	92.60
Interest on land 13/	Dol	--	--	--	179,683	226.59
Total other costs	Dol	--	--	--	293,523	370.14
Total all costs	Dol	--	--	--	451,571	569.45
Return above cash costs:						
and family labor	Dol	--	--	--	60,724	76.58
Return to total investment 14/	Dol	--	--	--	44,827	56.53
Return to land 15/	Dol	--	--	--	20,319	25.62
					-53,116	-66.98
Sales:						
Steer calves	Head	236	435	67.50	69,295	--
Heifer calves	Head	130	398	59.28	30,671	--
Yearling steers	Head	108	699	65.95	49,787	--
Yearling heifers	Head	67	643	60.85	26,215	--
Cull cows	Head	122	1,001	35.05	42,804	--
Total sales	Head				218,772	275.88
Cash costs:						
Federal grazing fees 3/	AM	1,219.9	--	1.86	2,269	2.86
Private pasture lease	AUM	1,383.9	--	8.90	12,317	15.53
Other pasture lease 4/	AUM	--	--	--	--	--
State land lease	AUM	832.5	--	3.92	3,263	4.12
Irrigated pasture	AUM	358.1	--	4.77	1,708	2.15
Hay produced	Ton	1,119.7	--	33.59	37,611	47.43
Hay purchased	Ton	208.4	--	57.33	11,948	15.07
Protein supplement 5/	Ton	22.9	--	241.00	5,519	6.96
		Jan.	Feb.	Mar.	Apr.	May
		June	July	Aug.	Sept.	Oct.
		Nov.	Dec.			
Feed source:						
National Forest 16/	AM	8.6	8.3	7.7	7.5	27.8
Bureau of Land Management 16/	AM	13.2	13.2	12.3	28.8	135.1
Pasture rent/Lease 17/	AUM	--	--	--	24.1	195.6
State land lease	AUM	--	--	--	63.6	134.8
Deeded rangeland 17/	AUM	91.1	101.5	113.0	226.7	642.4
Irrigated pasture 17/	AUM	--	--	--	--	3.6
Crop residue 17/	AUM	--	--	--	--	--
Hay	Ton	255.6	281.0	304.7	268.4	51.1
Grain	Bu	59.3	2.5	1.4	.5	--
Protein supplement	Ton	5.6	5.6	3.7	3.4	.1

See footnotes at end of Table C12.

Table C5--Average beef cow enterprise budget, with Federal Grazing Permits, Nebraska, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	984	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	46	--	--	--	--	Other feed	Ton	--	--	--	--	--
Cows culled	Head	108	--	--	--	--	Salt and mineral	Cwt	344.8	--	3.86	1,331	1.35
Calves born alive	Head	918	--	--	--	--	Veterinary & medicine	Dol	--	--	--	5,411	5.50
Calves lost birth to weaning	Head	39	--	--	--	--	Hired trucking	Dol	--	--	--	2,537	2.58
Steer calves weaned	Head	439	--	--	--	--	Marketing 6/	Dol	--	--	--	2,356	2.39
Sold as weaners	Head	225	--	--	--	--	General farm over-head 7/	Dol	--	--	--	5,527	5.62
Lost after weaning	Head	4	--	--	--	--	Hired labor	Hrs	7,151.0	--	4.40	31,464	31.98
Sold as yearlings	Head	210	--	--	--	--	Fuel and lubricants	Dol	--	--	--	6,255	6.36
Heifer calves weaned	Head	440	--	--	--	--	Repairs	Dol	--	--	--	8,035	8.17
Sold as weaners	Head	141	--	--	--	--	Taxes 8/	Dol	--	--	--	8,822	8.97
Lost after weaning	Head	5	--	--	--	--	Insurance	Dol	--	--	--	4,451	4.52
Sold as yearlings	Head	140	--	--	--	--	Interest on operating capital 9/	Dol	93,277.0	--	.16	14,644	14.88
Kept for herd replacement 2/	Head	154	--	--	--	--	Total cash costs	Dol	--	--	--	185,291	188.30
Sales:							Other costs:						
Steer calves	Head	225	457	67.24	69,140	--	Family labor 10/	Hrs	5,967.0	--	4.40	26,255	26.68
Heifer calves	Head	141	409	58.24	33,586	--	Capital replacement 11/	Dol	--	--	--	24,776	25.18
Yearling steers	Head	210	750	65.12	102,564	--	Interest on Investment other than land 12/	Dol	--	--	--	85,699	87.09
Yearling heifers	Head	140	666	60.85	56,737	--	Interest on land 13/	Dol	--	--	--	358,497	364.33
Cull cows	Head	108	936	37.71	38,120	--	Total other costs	Dol	--	--	--	495,227	503.28
Total sales	Head				300,147	305.03	Total all costs	Dol	--	--	--	680,518	691.58
Cash costs:							Return above cash costs:						
Federal grazing fees 3/	AM	1,600.6	--	1.86	2,977	3.03	Return above cash costs and family labor	Dol	--	--	--	114,856	116.72
Private pasture lease	AUM	2,095.2	--	13.80	28,914	29.38	Return to total investment 14/	Dol	--	--	--	63,825	64.86
Other pasture lease 4/	AUM	--	--	--	--	--	Return to land 15/	Dol	--	--	--	-21,874	-22.23
State land lease	AUM	--	--	--	--	--							
Irrigated pasture	AUM	--	--	--	--	--							
Hay produced	Ton	1,088.9	--	34.40	37,458	38.07							
Hay purchased	Ton	192.8	--	61.50	11,857	12.05							
Protein supplement 5/	Ton	59.8	--	221.60	13,252	13.47							

See footnotes at end of Table C12.

Table C6--Average beef cow enterprise budget, with Federal Grazing Permits, Nevada, 1962

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	1,327	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	56	--	--	--	--	Other feed	Ton	--	--	--	--	--
Cows culled	Head	106	--	--	--	--	Salt and mineral	Cwt	1,893.5	--	5.30	10,036	7.56
Calves born alive	Head	1,078	--	--	--	--	Veterinary & medicine	Dol	--	--	--	8,303	6.26
Calves lost birth to weaning	Head	65	--	--	--	--	Hired trucking	Dol	--	--	--	2,714	2.05
Steer calves weaned	Head	506	--	--	--	--	Marketing 6/	Dol	--	--	--	2,792	2.10
Sold as weaners	Head	274	--	--	--	--	General farm over-head 7/	Dol	--	--	--	10,243	7.72
Lost after weaning	Head	4	--	--	--	--	Hired labor	Hrs	8,930.7	--	4.22	37,688	28.40
Sold as yearlings	Head	228	--	--	--	--	Fuel and lubricants	Dol	--	--	--	7,644	5.76
Heifer calves weaned	Head	507	--	--	--	--	Repairs	Dol	--	--	--	9,069	6.83
Sold as weaners	Head	193	--	--	--	--	Taxes 8/	Dol	--	--	--	9,666	7.28
Lost after weaning	Head	6	--	--	--	--	Insurance	Dol	--	--	--	5,781	4.36
Sold as yearlings	Head	146	--	--	--	--	Interest on operating capital 9/	Dol	124,870	--	.15	18,481	13.93
Kept for herd replacement 2/	Head	162	--	--	--	--	Total cash costs	Dol	--	--	--	238,140	179.46
Sales:							Other costs:						
Steer calves	Head	274	402	67.43	74,273	--	Family labor 10/	Hrs	5,045.8	--	4.22	21,293	16.05
Heifer calves	Head	193	368	56.07	39,823	--	Capital replacement 11/	Dol	--	--	--	34,894	26.30
Yearling steers	Head	228	629	62.65	89,848	--	Interest on investment other than land 12/	Dol	--	--	--	115,172	86.79
Yearling heifers	Head	146	601	54.21	47,567	--	Interest on land 13/	Dol	--	--	--	348,016	262.26
Cull cows	Head	106	869	36.38	33,511	--	Total other costs	Dol	--	--	--	519,375	391.39
Total sales	Head				285,022	214.79	Total all costs	Dol	--	--	--	757,515	570.85
Cash costs:							Return above cash costs:						
Federal grazing fees 3/	AM	7,852.4	--	1.86	14,605	11.01	and family labor	Dol	--	--	--	46,882	35.33
Private pasture lease	AUM	1,022.2	--	5.70	5,827	4.39	Return above cash costs	Dol	--	--	--	25,589	19.28
Other pasture lease 4/	AUM	--	--	--	--	--	Return to total investment 14/	Dol	--	--	--	-9,305	-7.01
State land lease	AUM	--	--	--	--	--	Return to land 15/	Dol	--	--	--	-124,477	-93.80
Irrigated pasture	AUM	1,149.3	--	5.41	6,218	4.69							
Hay produced	Ton	1,342.2	--	45.70	61,339	46.22							
Hay purchased	Ton	251.0	--	74.67	18,742	14.12							
Protein supplement 5/	Ton	41.4	--	217.20	8,992	6.78							
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Feed source:													
National Forest 16/	AM	6.7	7.9	7.9	7.3	12.4	309.3	392.0	358.5	302.9	214.7	--	--
Bureau of Land Management 16/	AM	287.8	282.7	304.9	717.8	857.7	746.5	682.9	635.1	500.0	418.3	494.6	305.5
Pasture rent/Lease 17/	AUM	24.3	32.6	41.0	83.0	114.5	107.7	116.9	124.6	171.1	90.0	86.6	29.9
State land lease	AUM	--	--	--	--	--	--	--	--	--	--	--	--
Deeded rangeland 17/	AUM	193.8	286.3	313.1	1,114.3	1,508.8	1,148.4	1,219.7	1,028.9	1,318.3	1,125.5	734.2	180.7
Irrigated pasture 17/	AUM	--	--	--	--	29.4	146.7	112.0	380.0	303.6	117.3	56.0	4.3
Crop residue 17/	AUM	26.8	--	--	--	--	--	--	--	29.1	95.4	383.5	47.1
Hay	Ton	362.0	383.8	396.6	85.5	5.1	--	--	--	--	5.8	9.4	345.0
Grain	Bu	--	--	--	--	--	--	--	--	--	--	--	--
Protein supplement	Ton	9.7	9.7	9.7	3.0	--	--	--	--	--	--	2.5	6.8

See footnotes at end of Table C12.

Table C7--Average beef cow enterprise budget, with Federal Grazing Permits, New Mexico, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	576	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	21	--	--	--	--	Other feed	Ton	--	--	--	--	--
Cows culled	Head	75	--	--	--	--	Salt and mineral	Cwt	207.6	--	5.80	1,204	2.09
Calves born alive	Head	523	--	--	--	--	Veterinary & medicine	Dol	--	--	--	1,962	3.41
Calves lost birth to weaning	Head	26	--	--	--	--	Hired trucking	Dol	--	--	--	1,781	3.09
Steer calves weaned	Head	248	--	--	--	--	Marketing 6/	Dol	--	--	--	1,703	2.96
Sold as weaners	Head	178	--	--	--	--	General farm over-head 7/	Dol	--	--	--	5,370	9.32
Lost after weaning	Head	1	--	--	--	--	Hired labor	Hrs	3,642.3	--	4.82	17,556	30.48
Sold as yearlings	Head	69	--	--	--	--	Fuel and lubricants	Dol	--	--	--	5,192	9.01
Heifer calves weaned	Head	249	--	--	--	--	Repairs	Dol	--	--	--	5,554	9.64
Sold as weaners	Head	111	--	--	--	--	Taxes 8/	Dol	--	--	--	1,442	2.50
Lost after weaning	Head	3	--	--	--	--	Insurance	Dol	--	--	--	2,843	4.94
Sold as yearlings	Head	39	--	--	--	--	Interest on operating capital 9/	Dol	34,212.0	--	.15	5,269	9.15
Kept for herd replacement 2/	Head	96	--	--	--	--	Total cash costs	Dol	--	--	--	83,108	144.28
Sales:							Other costs:						
Steer calves	Head	178	416	65.41	48,435	--	Family labor 10/	Hrs	2,254.4	--	4.82	10,866	18.86
Heifer calves	Head	111	380	54.97	23,186	--	Capital replacement 11/	Dol	--	--	--	21,061	36.56
Yearling steers	Head	69	651	62.46	28,056	--	Interest on investment other than land 12/	Dol	--	--	--	58,265	101.15
Yearling heifers	Head	39	619	53.97	13,029	--	Interest on land 13/	Dol	--	--	--	85,509	148.45
Cull cows	Head	75	873	36.80	24,095	--	Total other costs	Dol	--	--	--	175,701	305.04
Total sales	Head				136,801	237.50	Total all costs	Dol	--	--	--	258,809	449.32
Cash costs:							Return above cash costs	Dol	--	--	--	53,693	93.22
Federal grazing fees 3/	AM	3,821.7	--	1.86	7,108	12.34	Return above cash costs and family labor	Dol	--	--	--	42,827	74.35
Private pasture lease	AUM	1,320.9	--	6.26	8,269	14.36	Return to total investment 14/	Dol	--	--	--	21,766	37.79
Other pasture lease 4/	AUM	--	--	--	--	--	Return to land 15/	Dol	--	--	--	-36,499	-63.31
State land lease	AUM	838.6	--	1.40	1,174	2.04							
Irrigated pasture	AUM	--	--	--	--	--							
Hay produced	Ton	36.7	--	37.25	1,367	2.37							
Hay purchased	Ton	61.9	--	79.00	4,890	8.49							
Protein supplement 5/	Ton	42.0	--	248.20	10,424	18.08							
Feed source:													
National Forest 16/	AM	114.1	113.5	115.4	118.3	126.1	140.9	146.5	145.5	143.0	131.3	107.5	104.0
Bureau of Land Management 16/	AM	186.0	186.2	186.4	191.2	197.9	196.6	195.0	195.0	195.3	195.4	194.8	195.8
Pasture rent/Lease 17/	AUM	80.5	90.1	98.1	114.0	127.1	133.2	139.7	143.6	139.6	123.4	63.6	68.0
State land lease	AUM	46.9	52.6	59.6	70.6	81.7	86.8	89.9	92.4	89.8	79.3	43.2	45.8
Deeded rangeland 17/	AUM	225.5	251.8	276.9	311.6	375.4	348.8	388.3	401.0	386.3	337.9	177.8	194.3
Irrigated pasture 17/	AUM	--	--	--	--	--	--	--	--	--	--	--	--
Crop residue 17/	AUM	--	--	--	--	--	--	--	--	--	16.4	--	--
Hay	Ton	7.7	8.4	7.4	7.3	--	--	--	--	--	--	29.7	38.1
Grain	Bu	--	--	--	--	--	--	--	--	--	--	--	--
Protein supplement	Ton	11.8	11.9	10.0	4.8	--	1.3	1.3	--	--	--	--	.9

See footnotes at end of Table C12.

Table C8--Average beef cow enterprise budget, with Federal Grazing Permits, Oregon, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:						
Bred cows 1/	: Head :	1,204	--	--	--	--
Annual cow loss	: Head :	22	--	--	--	--
Cows culled	: Head :	168	--	--	--	--
Calves born alive	: Head :	997	--	--	--	--
Calves lost birth to weaning	: Head :	60	--	--	--	--
Steer calves weaned	: Head :	468	--	--	--	--
Sold as weaners	: Head :	207	--	--	--	--
Lost after weaning	: Head :	5	--	--	--	--
Sold as yearlings	: Head :	256	--	--	--	--
Heifer calves weaned	: Head :	469	--	--	--	--
Sold as weaners	: Head :	124	--	--	--	--
Lost after weaning	: Head :	7	--	--	--	--
Sold as yearlings	: Head :	148	--	--	--	--
Kept for herd replacement 2/	: Head :	190	--	--	--	--
Cash costs--Continued						
Grain	: Bu :	196.0	--	3.16	619	.51
Other feed	: Ton :	--	--	--	--	--
Salt and mineral	: Cwt :	390.2	--	6.63	2,587	2.15
Veterinary & medicine	: Dol :	--	--	--	6,998	5.81
Hired trucking	: Dol :	--	--	--	2,826	2.35
Marketing 6/	: Dol :	--	--	--	3,219	2.67
General farm over-head 7/	: Dol :	--	--	--	17,826	14.81
Hired labor	: Hrs :	4,980.7	--	4.20	20,919	17.37
Fuel and lubricants	: Dol :	--	--	--	10,092	8.38
Repairs	: Dol :	--	--	--	9,264	7.69
Taxes 8/	: Dol :	--	--	--	6,475	5.38
Insurance	: Dol :	--	--	--	5,317	4.42
Interest on operating capital 9/	: Dol :	90,561.0	--	.15	13,403	11.13
Total cash costs	: Dol :	--	--	--	205,338	170.55
Other costs:						
Family labor 10/	: Hrs :	3,435.0	--	4.20	14,427	11.98
Capital replacement 11/	: Dol :	--	--	--	30,035	24.95
Interest on investment other than land 12/	: Dol :	--	--	--	107,944	89.65
Interest on land 13/	: Dol :	--	--	--	287,487	238.78
Total other costs	: Dol :	--	--	--	439,893	365.36
Total all costs	: Dol :	--	--	--	645,231	535.91
Return above cash costs:						
and family labor	: Dol :	--	--	--	84,288	70.01
Return to total investment 14/	: Dol :	--	--	--	54,253	45.06
Return to land 15/	: Dol :	--	--	--	-53,691	-44.59
Sales:						
Steer calves	: Head :	207	439	64.44	58,559	--
Heifer calves	: Head :	124	417	54.08	27,964	--
Yearling steers	: Head :	256	663	63.50	107,777	--
Yearling heifers	: Head :	148	631	56.56	52,820	--
Cull cows	: Head :	168	939	36.09	56,933	--
Total sales	: Head :	--	--	--	304,053	252.54
Cash costs:						
Federal grazing fees 3/	: AM :	3,871.7	--	1.86	7,201	5.98
Private pasture lease	: AUM :	1,714.9	--	7.70	13,205	10.97
Other pasture lease 4/	: AUM :	--	--	--	--	--
State land lease	: AUM :	270.0	--	1.56	421	.35
Irrigated pasture	: AUM :	1,274.7	--	5.05	6,437	5.35
Hay produced	: Ton :	1,505.9	--	37.17	55,917	46.44
Hay purchased	: Ton :	213.2	--	70.00	14,924	12.40
Protein supplement 5/	: Ton :	36.3	--	211.80	7,688	6.38
Feed source:						
National Forest 16/	: AM :	5.1	5.0	5.2	9.2	21.7
Bureau of Land Management 16/	: AM :	7.4	7.0	155.5	412.0	556.7
Pasture rent/Lease 17/	: AUM :	6.7	8.1	9.3	163.6	256.4
State land lease	: AUM :	--	--	--	9.1	52.4
Deeded rangeland 17/	: AUM :	160.7	177.9	247.7	720.1	901.4
Irrigated pasture 17/	: AUM :	--	--	--	22.6	144.5
Crop residue 17/	: AUM :	--	--	--	--	--
Hay	: Ton :	397.6	437.3	407.2	156.1	2.1
Grain	: Bu :	98.0	98.0	--	--	--
Protein supplement	: Ton :	10.2	7.8	7.2	2.2	--

See footnotes at end of Table C12.

Table C9--Average beef cow enterprise budget, with Federal Grazing Permits, South Dakota, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	
Production:							Cash costs--Continued							
Bred cows 1/	Head	356	--	--	--	--	Grain	Bu	--	--	--	--	--	
Annual cow loss	Head	11	--	--	--	--	Other feed	Ton	--	--	--	--	--	
Cows culled	Head	43	--	--	--	--	Salt and mineral	Cwt	125.0	--	4.82	602	1.69	
Calves born alive	Head	313	--	--	--	--	Veterinary & medicine	Dol	--	--	--	1,700	4.78	
Calves lost birth to weaning	Head	16	--	--	--	--	Hired trucking	Dol	--	--	--	898	2.52	
Steer calves weaned	Head	148	--	--	--	--	Marketing 6/	Dol	--	--	--	736	2.07	
Sold as weaners	Head	130	--	--	--	--	General farm over-							
Lost after weaning	Head	1	--	--	--	--	head 7/	Dol	--	--	--	2,736	7.69	
Sold as yearlings	Head	17	--	--	--	--	Hired labor	Hrs	687.0	--	4.00	2,748	7.72	
Heifer calves weaned	Head	149	--	--	--	--	Fuel and lubricants	Dol	--	--	--	8,861	24.89	
Sold as weaners	Head	90	--	--	--	--	Repairs	Dol	--	--	--	6,223	17.48	
Lost after weaning	Head	2	--	--	--	--	Taxes 8/	Dol	--	--	--	3,866	10.86	
Sold as yearlings	Head	3	--	--	--	--	Insurance	Dol	--	--	--	1,995	5.60	
Kept for herd replacement 2/	Head	54	--	--	--	--	Interest on operating capital 9/	Dol	36,894.0	--	.16	5,792	16.27	
							Total cash costs	Dol	--	--	--	70,458	197.92	
Sales:							Other costs:							
Steer calves	Head	130	428	66.80	37,168	--	Family labor 10/	Hrs	2,025.0	--	4.00	8,100	22.75	
Heifer calves	Head	90	393	59.93	21,197	--	Capital replacement 11/	Dol	--	--	--	15,722	44.16	
Yearling steers	Head	17	664	63.10	7,123	--	Interest on investment other than land 13/	Dol	--	--	--	38,315	107.63	
Yearling heifers	Head	3	570	58.76	1,005	--	Interest on land 13/	Dol	--	--	--	97,916	275.04	
Cull cows	Head	43	1,008	36.29	15,730	--	Total other costs	Dol	--	--	--	160,053	449.59	
Total sales	Head	--	--	--	82,223	230.96	Total all costs	Dol	--	--	--	230,511	647.50	
Cash costs:							Return above cash costs:							
Federal grazing fees 3/	AM	579.2	--	1.86	1,077	3.03	and family labor	Dol	--	--	--	3,665	10.29	
Private pasture lease	AUM	558.6	--	11.09	6,195	17.40	Return to total investment 14/	Dol	--	--	--	-12,057	-33.87	
Other pasture lease 4/	AUM	--	--	--	--	--	Return to land 15/	Dol	--	--	--	-50,372	-141.49	
State land lease	AUM	--	--	--	--	--								
Irrigated pasture	AUM	--	--	--	--	--								
Hay produced	Ton	539.3	--	34.40	18,552	52.11								
Hay purchased	Ton	59.8	--	82.67	4,944	13.89								
Protein supplement 5/	Ton	15.9	--	222.20	3,533	9.92								
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Feed source:														
National Forest 16/	AM	--	--	--	--	--	--	102.1	143.2	143.2	140.3	50.4	--	--
Bureau of Land Management 16/	AM	--	--	--	--	--	--	--	--	--	--	--	--	--
Pasture rent/Lease 17/	AUM	--	--	--	--	118.9	97.1	88.5	90.0	88.3	75.8	--	--	--
State land lease	AUM	--	--	--	--	--	--	--	--	--	--	--	--	--
Deeded rangeland 17/	AUM	--	--	--	288.3	477.7	391.1	355.7	360.6	353.7	305.8	40.3	--	--
Irrigated pasture 17/	AUM	--	--	--	--	--	--	--	--	--	--	--	--	--
Crop residue 17/	AUM	--	--	--	--	--	--	--	--	--	67.2	375.3	56.5	--
Hay	Ton	124.0	136.9	151.2	79.9	--	--	--	--	--	--	--	107.1	--
Grain	Bu	--	--	--	--	--	--	--	--	--	--	--	--	--
Protein supplement	Ton	4.0	4.0	1.6	--	--	--	--	--	--	--	2.3	4.0	--

See footnotes at end of Table C12.

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Table C11--Average beef cow enterprise budget, with Federal Grazing Permits, Washington, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	333	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	13	--	--	--	--	Other feed	Ton	--	--	--	--	--
Cows culled	Head	52	--	--	--	--	Salt and mineral	Cwt	117.5	--	7.24	851	2.56
Calves born alive	Head	307	--	--	--	--	Veterinary & medicine	Dol	--	--	--	2,214	6.65
Calves lost birth to weaning	Head	12	--	--	--	--	Hired trucking	Dol	--	--	--	1,304	3.92
Steer calves weaned	Head	147	--	--	--	--	Marketing 6/	Dol	--	--	--	987	2.96
Sold as weaners	Head	78	--	--	--	--	General farm over-head 7/	Dol	--	--	--	4,531	13.61
Lost after weaning	Head	1	--	--	--	--	Hired labor	Hrs	1,682.0	--	4.34	7,300	21.92
Sold as yearlings	Head	68	--	--	--	--	Fuel and lubricants	Dol	--	--	--	4,909	14.74
Heifer calves weaned	Head	148	--	--	--	--	Repairs	Dol	--	--	--	4,197	12.60
Sold as weaners	Head	37	--	--	--	--	Taxes 8/	Dol	--	--	--	2,734	8.21
Lost after weaning	Head	2	--	--	--	--	Insurance	Dol	--	--	--	1,490	4.47
Sold as yearlings	Head	44	--	--	--	--	Interest on operating capital 9/	Dol	37,186.0	--	.15	5,504	16.53
Kept for herd replacement 2/	Head	65	--	--	--	--	Total cash costs	Dol	--	--	--	69,436	208.52
Sales:							Other costs:						
Steer calves	Head	78	475	65.11	24,123	--	Family labor 10/	Hrs	2,574.0	--	4.34	11,171	33.55
Heifer calves	Head	37	436	54.09	8,726	--	Capital replacement 11/	Dol	--	--	--	10,205	30.65
Yearling steers	Head	68	679	61.42	28,359	--	Interest on investment other than land 12/	Dol	--	--	--	31,220	93.75
Yearling heifers	Head	44	633	54.39	15,149	--	Interest on land 13/	Dol	--	--	--	78,470	235.65
Cull cows	Head	52	996	34.94	18,096	--	Total other costs	Dol	--	--	--	131,066	393.59
Total sales	Head				94,453	283.64	Total all costs	Dol	--	--	--	200,502	602.11
Cash costs:							Return above cash costs:						
Federal grazing fees 3/	AM	606.9	--	1.86	1,129	3.39	Return above cash costs and family labor	Dol	--	--	--	25,017	75.13
Private pasture lease	AUM	456.5	--	6.67	3,045	9.14	Return to total	Dol	--	--	--	13,846	41.58
Other pasture lease 4/	AUM	--	--	--	--	--	Investment 14/	Dol	--	--	--	3,641	10.93
State land lease	AUM	184.7	--	4.32	798	2.40	Return to land 15/	Dol	--	--	--	-27,579	-82.82
Irrigated pasture	AUM	148.5	--	4.12	612	1.84							
Hay produced	Ton	474.1	--	32.91	15,603	46.85							
Hay purchased	Ton	110.3	--	72.00	7,942	23.85							
Protein supplement 5/	Ton	16.9	--	253.60	4,286	12.87							
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Feed source:													
National Forest 16/	AM	--	--	--	--	11.2	106.5	144.4	150.8	149.7	35.2	--	--
Bureau of Land Management 16/	AM	--	--	--	--	.4	2.7	2.7	2.7	.6	--	--	--
Pasture rent 7/Tease 17/	AUM	--	--	--	36.8	55.1	64.4	62.0	61.3	60.1	46.4	40.7	29.7
State land lease	AUM	--	--	--	3.1	17.4	45.9	46.0	46.1	18.7	2.8	2.3	2.4
Deeded rangeland 17/	AUM	42.2	92.0	111.8	161.1	428.7	366.0	330.7	331.4	226.4	204.4	162.8	72.6
Irrigated pasture 17/	AUM	--	--	--	--	--	--	--	--	124.4	1.1	12.0	11.0
Crop residue 17/	AUM	--	--	--	--	--	--	--	--	--	183.0	70.6	14.1
Hay	Ton	114.0	108.8	113.9	99.4	20.9	--	--	--	--	--	39.4	

See footnotes at end of Table C12.

Table C12--Average beef cow enterprise budget, with Federal Grazing Permits, Wyoming, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow	Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per cow
Production:							Cash costs--Continued						
Bred cows 1/	Head	1,087	--	--	--	--	Grain	Bu	--	--	--	--	--
Annual cow loss	Head	25	--	--	--	--	Other feed	Ton	--	--	--	--	--
Cows culled	Head	122	--	--	--	--	Salt and mineral	Cwt	385.0	--	3.91	1,505	1.38
Calves born alive	Head	950	--	--	--	--	Veterinary & medicine	Dol	--	--	--	5,946	5.47
Calves lost birth to weaning	Head	43	--	--	--	--	Hired trucking	Dol	--	--	--	3,654	3.36
Steer calves weaned	Head	453	--	--	--	--	Marketing 6/	Dol	--	--	--	3,528	3.25
Sold as weaners	Head	269	--	--	--	--	General farm over-head 7/	Dol	--	--	--	10,656	9.80
Lost after weaning	Head	4	--	--	--	--	Hired labor	Hrs	6,588.0	--	4.20	27,670	25.46
Sold as yearlings	Head	180	--	--	--	--	Fuel and lubricants	Dol	--	--	--	10,190	9.37
Heifer calves weaned	Head	454	--	--	--	--	Repairs	Dol	--	--	--	13,129	12.08
Sold as weaners	Head	169	--	--	--	--	Taxes 8/	Dol	--	--	--	5,681	5.23
Lost after weaning	Head	3	--	--	--	--	Insurance	Dol	--	--	--	5,041	4.64
Sold as yearlings	Head	135	--	--	--	--	Interest on operating capital 9/	Dol	92,582.0	--	.16	14,813	13.63
Kept for herd replacement 2/	Head	147	--	--	--	--	Total cash costs	Dol	--	--	--	200,285	184.25
Sales:							Other costs:						
Steer calves	Head	269	420	68.49	77,380	--	Family labor 10/	Hrs	4,191.0	--	4.20	17,602	16.19
Heifer calves	Head	169	395	59.85	39,953	--	Capital replacement 11/	Dol	--	--	--	45,408	41.77
Yearling steers	Head	180	671	64.43	77,819	--	Interest on investment other than land 12/	Dol	--	--	--	98,217	90.36
Yearling heifers	Head	135	648	57.96	50,703	--	Interest on land 13/	Dol	--	--	--	284,442	261.68
Cull cows	Head	122	991	36.40	44,008	--	Total other costs	Dol	--	--	--	445,669	410.00
Total sales	Head				289,863	266.66	Total all costs	Dol	--	--	--	645,954	594.25
Cash costs:							Return above cash costs:						
Federal grazing fees 3/	AM	3,326.0	--	1.86	6,186	5.69	Return above cash costs and family labor	Dol	--	--	--	89,578	82.41
Private pasture lease	AUM	1,013.7	--	8.46	8,576	7.89	Return to total investment 14/	Dol	--	--	--	71,976	66.22
Other pasture lease 4/	AUM	--	--	--	--	--	Return to land 15/	Dol	--	--	--	26,568	24.44
State land lease	AUM	617.9	--	1.44	890	.82					--	-71,649	-65.91
Irrigated pasture	AUM	--	--	--	--	--							
Hay produced	Ton	1,504.2	--	35.06	52,737	48.52							
Hay purchased	Ton	257.1	--	63.83	16,411	15.10							
Protein supplement 5/	Ton	62.6	--	218.40	13,672	12.58							
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Feed source:													
National Forest 16/	AM	--	--	--	--	.2	123.6	307.7	410.9	394.2	111.4	7.0	--
Bureau of Land Management 16/	AM	67.3	24.4	14.1	39.0	281.9	337.8	261.4	242.7	251.9	204.4	134.0	112.1
Pasture rent/Tease 17/	AUM	--	--	--	49.7	165.2	152.3	130.0	136.3	134.3	144.9	101.0	--
State land lease	AUM	--	--	--	17.7	95.6	103.9	95.0	97.8	95.6	77.8	34.5	--
Deeded rangeland 17/	AUM	101.3	161.0	215.7	345.2	1,232.7	1,068.6	984.6	873.9	857.8	711.1	389.6	53.5
Irrigated pasture 17/	AUM	--	--	--	--	--	--	--	--	--	--	--	--
Crop residue 17/	AUM	--	--	--	--	--	--	--	--	--	--	--	--
Hay	Ton	340.5	373.7	393.2	368.4	1.3	--	--	--	--	341.1	548.4	313.9
Grain	Bu	--	--	--	--	--	--	--	--	--	--	35.3	248.9
Protein supplement	Ton	12.9	13.5	13.2	9.1	.2	--	--	--	--	--	1.5	12.2

- 1/ January bred cow inventory.
- 2/ Heifers that replace cows lost and cows culled so herd size is maintained.
- 3/ Includes both Forest Service and Bureau of Land Management grazing fees.
- 4/ Includes leases on Indian land, industrial forests, grazing associations, City and County lands, railroad lands, etc.
- 5/ Beef cattle concentrate 32-36 percent protein.
- 6/ Includes purchase and sales commission, brand inspection, health certificates, yardage, etc.
- 7/ Includes general farm expenses as telephone, organization dues, professional fees, etc.
- 8/ Includes real estate, personal property, vehicle use fees, and miscellaneous taxes.
- 9/ Interest is charged for only months when money is in use.
- 10/ Family labor is priced at the same rate as hired labor and does not account for management.
- 11/ Assets are valued at current replacement cost and then treated in the same manner as depreciation.
- 12/ Interest on investment is based on original purchase price.
- 13/ Interest is based on current market price for real estate.
- 14/ Return above cash costs and family labor minus capital replacement.
- 15/ Return to total investment minus interest on investment other than land.
- 16/ An animal month (AM) is a cow with a calf under six months old, a dry cow, or a calf or yearling over six months old.
- 17/ An animal unit month (AUM) is equal to 300 pounds of total digestible nutrients.

21

Wila

See footnotes at end of Table C21.

See footnotes at end of Table C21.

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See footnotes at end of Table C21.

See footnotes at end of Table C21.

See footnotes at end of Table C21.

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See footnotes at end of Table C21.

Item	Unit	Number	Average weight (pounds)	Price	Total Value	Value per ewe
Production:						
Ewes lambed	Head	2,371	--	--	--	--
Annual ewe loss	Head	164	--	--	--	--
Ewes sold	Head	253	--	--	--	--
Lambs docked	Head	2,569	--	--	--	--
Lambs lost from docking to marketing	Head	308	--	--	--	--
Lambs held as replacements	Head	417	--	--	--	--
Lambs sold:						
Slaughter lambs	Head	1,148	--	--	--	--
Feeder lambs	Head	696	--	--	--	--
Cash costs--Continued						
Marketing 4/	Dol	--	--	--	287	.12
Trucking	Dol	--	--	--	7,139	3.01
Shearing	Dol	--	--	--	5,053	2.13
Ram death loss 5/	Dol	--	--	--	1,429	.60
Miscellaneous 6/	Dol	--	--	--	4,767	2.00
Hired labor	Hrs	5,553	--	4.35	24,156	10.19
Fuel and lubricants	Dol	--	--	--	4,583	1.93
Repairs	Dol	--	--	--	7,930	3.34
Taxes 7/	Dol	--	--	--	1,384	.58
Insurance	Dol	--	--	--	1,284	.54
General farm overhead 8/	Dol	--	--	--	3,470	1.46
Interest on operating capital 9/	Dol	39,655	--	.15	5,948	2.51
Total cash costs	Dol	--	--	--	105,357	44.45
Other costs:						
Family labor 10/	Hrs	2,259	--	4.35	9,827	4.14
Depreciation 11/	Dol	--	--	--	21,790	9.19
Interest on investment other than land 12/	Dol	--	--	--	33,535	14.14
Interest on land 13/	Dol	--	--	--	126,890	53.52
Total other costs	Dol	--	--	--	192,042	81.00
Total all costs	Dol	--	--	--	297,281	125.45
Return above cash costs						
Return above cash costs	Dol	--	--	--	37,534	15.83
Return above cash costs and family labor	Dol	--	--	--	27,707	11.69
Return to total investment 14/	Dol	--	--	--	5,917	2.50
Return to land 15/	Dol	--	--	--	-27,618	-11.65
Cash costs:						
Irrigated pasture	AUM	--	--	--	--	--
Federal grazing fees	AM	1,479.0	--	1.86	2,751	1.16
Pasture rent/lease 3/	AUM	1,173.0	--	7.70	9,032	3.81
Hay purchased	Ton	98.1	--	70.00	6,867	2.90
Hay produced	Ton	30.5	--	37.17	1,134	.48
Grain	Bu	558.8	--	3.18	1,777	.75
Protein supplement	Ton	55.9	--	211.8	11,840	4.99
Salt and mineral	Cwt	514.0	--	6.63	3,408	1.44
Veterinary and medicine	Dol	864.0	--	1.34	1,158	.49
		Jan.	Feb.	Mar.	Apr.	May
						June
						July
						Aug.
						Sept.
						Oct.
						Nov.
						Dec.
Feed source:						
National Forest Bureau of Land Management	AM	66.4	66.4	41.6	72.0	83.1
Pasture rent/lease	AUM	100.6	85.7	91.8	117.6	126.5
Decided rangeland	AUM	212.4	177.6	243.8	233.6	250.3
Irrigated pasture	AUM	--	--	--	--	--
Crop residue	AUM	--	--	--	--	--
Hay	Ton	33.9	33.9	33.9	13.5	12.0
Grain	Bu	139.7	139.7	139.7	139.7	--
Protein supplement	Ton	5.1	12.7	12.7	12.7	7.7

See footnotes at end of Table C21.

Table C21--Average sheep enterprise budget with Federal Grazing Permits, Wyoming, 1982

Item	Unit	Number	Average weight (pounds)	Price	Total Value per ewe
Production:					
Ewes lambd	Head	3,444	--	--	--
Annual ewe loss	Head	179	--	--	--
Ewes sold	Head	444	--	--	--
Lambs docked	Head	3,396	--	--	--
Lambs lost from docking to marketing	Head	268	--	--	--
Lambs held as replacements	Head	623	--	--	--
Lambs sold:					
Slaughter lambs	Head	1,462	--	--	--
Feeder lambs	Head	1,043	--	--	--
Sales:					
Slaughter lambs	Head	1,462	102	48.11	71,744
Feeder lambs	Head	1,043	85	48.83	43,290
Cull ewes	Head	444	125	10.60	5,883
Wool	Lbs	41,193	--	.89	36,662
Wool incentive payments 1/	Dol	36,662	-	1.00	36,662
Unshorn lamb payment 2/	Cwt	2,378	--	2.74	6,516
Total sales	Dol	--	--	--	200,757
Cash costs:					
State grazing fees	AUM	427.6	--	1.44	616
Irrigated pasture	AUM	--	--	--	--
Federal grazing fees	AM	2,391.7	--	1.86	4,449
Pasture rent/lease 3/	AUM	774.5	--	8.46	6,552
Hay purchased	Ton	182.1	--	63.83	11,623
Hay produced	Ton	650.1	--	35.06	22,793
Grain	Bu	1,166.6	--	3.18	3,710
Protein Supplement	Ton	--	--	--	--
Salt and mineral	Cwt	165.2	--	3.91	646
Vet. and medicine	Dol	--	--	--	2,184
Cash costs--Continued					
Marketing 4/	Dol	--	--	--	821
Trucking	Dol	--	--	--	8,512
Shearing	Dol	--	--	--	6,187
Ram death loss 5/	Dol	--	--	--	1,512
Miscellaneous 6/	Dol	--	--	--	6,116
Hired labor	Hrs	3,154.0	--	4.20	13,247
Fuel and lubricants	Dol	--	--	--	6,227
Repairs	Dol	--	--	--	4,523
Taxes 7/	Dol	--	--	--	1,825
Insurance	Dol	--	--	--	1,772
General farm overhead 8/	Dol	--	--	--	5,119
Interest on operating capital 9/	Dol	45,932	--	.16	7,211
Total cash costs	Dol	--	--	--	115,645
Other costs:					
Family labor 10/	Hrs	4,128.0	--	4.20	17,338
Depreciation 11/	Dol	--	--	--	18,970
Interest on investment other than land 12/	Dol	--	--	--	41,158
Interest on land 13/	Dol	--	--	--	132,030
Total other costs	Dol	--	--	--	209,496
Total all costs	Dol	--	--	--	325,141
Return above cash costs:					
Return above cash costs	Dol	--	--	--	85,112
Return above cash costs and family labor	Dol	--	--	--	67,774
Return to total investment 14/	Dol	--	--	--	48,804
Return to land 15/	Dol	--	--	--	7,646
Feed source:					
State Land	AM	18.7	18.6	20.9	17.7
National Forest	AM	--	--	--	--
Bureau of Land Management	AM	147.6	145.1	144.8	154.3
Pasture rent/lease	AUM	30.2	30.0	33.2	26.3
Deeded rangeland	AUM	43.9	45.5	73.3	211.5
Irrigated pasture	AUM	--	--	--	--
Crop residue	AUM	--	--	--	--
Hay	Ton	160.4	159.8	178.2	131.0
Grain	Bu	165.1	165.1	300.1	412.5
Protein supplement	Ton	--	--	--	--

- 1/ Based on a 1982 wool support price of \$1.37 per pound and a national average market price for wool of \$.684.
- 2/ Based on 80 percent of the difference between the support price and the national average market price for wool multiplied by 5 pounds which is the estimated average wool production per hundredweight of live lamb.
- 3/ Includes all pasture and rangeland leased other than federal grazing land.
- 4/ Includes all selling and purchase costs other than transportation.
- 5/ Ram death loss is a cash expense since it is incurred annually and requires direct cash outlays.
- 6/ Includes association dues, wool storage, predator control, legal and accounting fees, and utilities other than electricity.
- 7/ Includes both real estate and personal property.
- 8/ The sheep enterprises share of general farm expenses.
- 9/ Interest is calculated for only the time money is in use by the enterprise.
- 10/ Family labor includes work done by the operator or other family members. Family labor is valued at the same price as hired labor.
- 11/ Depreciation is based on current replacement cost of assets instead of original purchase price.
- 12/ Interest on investment is based on original purchase price.
- 13/ Interest on land is based on current market price.
- 14/ Return above cash costs and family labor minus depreciation.
- 15/ Return to total investment minus interest on investment other than land.

1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1011	1010	1009	1008	1007	1006	1005	1004	1003	1002	1001	1000	999	998	997	996	995	994	993	992	991	990	989	988	987	986	985	984	983	982	981	980	979	978	977	976	975	974	973	972	971	970	969	968	967	966	965	964	963	962	961	960	959	958	957	956	955	954	953	952	951	950	949	948	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931	930	929	928	927	926	925	924	923	922	921	920	919	918	917	916	915	914	913	912	911	910	909	908	907	906	905	904	903	902	901	900	899	898	897	896	895	894	893	892	891	890	889	888	887	886	885	884	883	882	881	880	879	878	877	876	875	874	873	872	871	870	869	868	867	866	865	864	863	862	861	860	859	858	857	856	855	854	853	852	851	850	849	848	847	846	845	844	843	842	841	840	839	838	837	836	835	834	833	832	831	830	829	828	827	826	825	824	823	822	821	820	819	818	817	816	815	814	813	812	811	810	809	808	807	806	805	804	803	802	801	800	799	798	797	796	795	794	793	792	791	790	789	788	787	786	785	784	783	782	781	780	779	778	777	776	775	774	773	772	771	770	769	768	767	766	765	764	763	762	761	760	759	758	757	756	755	754
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Table D1--Beef cow enterprises with up to 99 cows, western region, 1982

Item	Dollars/cow
Cash receipts:	
Steer calves (1.159 cwt.)	77.63
Heifer calves (.870 cwt.)	51.08
Yearling steers (1.142 cwt.)	71.81
Yearling heifers (.785 cwt.)	45.02
Cull cows (.774 cwt.)	28.31
Total	273.85
Cash costs:	
Federal grazing fees (.133 AM)	.25
Deeded rangeland (6.1 AUM)	0
Other pasture (5.399 AUM)	44.95
Crop residue (1.108 AUM)	0
Hay (1.669 Tons)	44.28
Protein supplement (.029 Tons)	6.61
Grain (2.501 Bu.)	6.07
Salt and Mineral (.36 cwt.)	1.85
Veterinary and medicine	7.63
Hired trucking	2.51
Marketing	5.12
General farm overhead	16.55
Hired labor (1.789 hrs.)	7.76
Taxes	10.68
Insurance	5.45
Fuel	23.92
Repairs	24.80
Interest on operating capital	17.32
Total cash costs	225.75
Other costs:	
Family labor (25.904 hrs.)	108.91
Capital replacement	57.48
Interest on investment	
Other than land	45.26
Interest on land	94.72
Total other costs	306.37
Total all costs	532.12
Return above cash costs	48.10
Return above cash costs and family labor	-60.81
Return to total investment	-118.29
Return to land	-163.55

Table D2--Beef cow enterprises with 100-499 cows, western region, 1982

Item	Dollars/cow
Cash receipts:	
Steer calves (1.132 cwt.)	75.92
Heifer calves (.780 cwt.)	45.86
Yearling steers (1.218 cwt.)	76.81
Yearling heifers (.776 cwt.)	44.92
Cull cows (.993 cwt.)	36.52
Total	280.03
Cash costs:	
Federal grazing fees (.308 AM)	.57
Deeded rangeland (6.937 AUM)	0
Other pasture (4.937 AUM)	42.98
Crop residue (.574 AUM)	0
Hay (1.402 Tons)	40.70
Corn silage (.160 Tons)	3.03
Protein supplement (.068 Tons)	17.15
Grain (4.536 Bu.)	11.71
Salt and Mineral (.36 cwt.)	1.83
Veterinary and medicine	6.53
Hired trucking	2.49
Marketing	3.47
General farm overhead	13.35
Hired labor (5.064 hrs.)	21.58
Taxes	9.15
Insurance	4.99
Fuel	17.32
Repairs	16.20
Interest on operating capital	14.90
Total cash costs	227.95
Other costs:	
Family labor (17.293 hrs.)	73.34
Capital replacement	40.00
Interest on investment	
Other than land	36.49
Interest on land	86.60
Total other costs	236.43
Total all costs	464.38
Return above cash costs	52.08
Return above cash costs and family labor	-21.26
Return to total investment	-61.20
Return to land	-97.75

Table D3--Beef cow enterprises with 500 or more cows, western region, 1982

Item	Dollars/cow
Cash receipts:	
Steer calves (.702 cwt.)	46.57
Heifer calves (.411 cwt.)	23.57
Yearling steers (1.725 cwt.)	108.67
Yearling heifers (6.234 cwt.)	72.06
Cull cows (.965 cwt.)	35.24
Total	286.11
Cash costs:	
Federal grazing fees (.351 AM)	.65
Deeded rangeland (8.624 AUM)	0
Other pasture (6.280 AUM)	52.76
Crop residue (.439 AUM)	0
Hay (1.011 Tons)	28.97
Protein supplement (.047 Tons)	10.34
Grain (1.581 Bu.)	4.47
Salt and mineral (.36 cwt.)	1.88
Veterinary and medicine	5.12
Hired trucking	3.13
Marketing	2.25
General farm overhead	4.99
Hired labor (8.268 hrs.)	35.47
Taxes	7.62
Insurance	4.58
Fuel	10.83
Repairs	16.56
Interest on operating capital	9.45
Total cash costs	199.07
Other costs:	
Family labor (4.028 hrs)	16.96
Capital replacement	40.02
Interest on investment	
Other than land	37.34
Interest on land	76.18
Total other costs	170.50
Total all costs	369.57
Return above cash costs	87.04
Return above cash costs and family labor	70.08
Return to total investment	30.06
Return to land	-7.28

Table D4--Sheep enterprises with 100-299 ewes, western states, 1982

Item	Dollars/ewe
Cash receipts:	
Slaughter lambs (.291 cwt.)	15.19
Feeder lambs (.320 cwt.)	16.50
Cull ewes (.262 cwt.)	2.79
Wool (9.17 lbs.)	7.74
Incentive payments	9.41
Total	51.63
Cash costs:	
Federal grazing fees (.172 AM)	.32
Deeded rangeland (1.577 AUM)	0
Other pasture (.546 AUM)	4.22
Crop residue (.076 AUM)	.04
Hay (.179 Ton)	4.36
Grain (2.266 Bu.)	6.39
Protein supplement (.016 Ton)	2.64
Salt and mineral (.070 cwt.)	.37
Veterinary and medicine	1.29
Marketing	.53
Hired trucking	.13
General farm overhead	.85
Miscellaneous	1.87
Hired labor (.952 hrs.)	4.02
Interest on operating capital	2.46
Taxes	1.61
Insurance	.65
Fuel	2.96
Repairs	2.71
Total cash costs	37.42
Other costs:	
Family labor (2.921 hrs.)	12.28
Capital replacement	6.87
Interest on investment other than land	4.74
Interest on land	17.09
Total other costs	40.98
Total all costs	78.40
Return above cash costs	14.21
Return above cash costs and family labor	1.93
Return to total capital	-4.94
Return to land	-9.68

Table D5--Sheep enterprises with 300-999 ewes, western states, 1982

Item	Dollars/ewe
Cash receipts:	
Slaughter lambs (.316 cwt.)	17.66
Feeder lambs (.268 cwt.)	13.08
Cull ewes (.318 cwt.)	3.37
Wool (9.493 lbs.)	8.31
Incentive payments	9.91
Total	52.33
Cash costs:	
Federal grazing fees (.187 AM)	.35
Deeded rangeland (1.843 AUM)	0
Other pasture (.375 AUM)	2.66
Crop residue (.086 AUM)	.04
Hay (.108 Ton)	3.99
Grain (.732 Bu.)	2.04
Protein supplement (.023 Ton)	3.76
Salt and mineral (.070 cwt.)	.36
Veterinary and medicine	1.09
Marketing	.24
Hired trucking	.87
General farm overhead	1.44
Miscellaneous	2.06
Hired labor (1.397 hrs.)	5.82
Interest on operating capital	2.13
Taxes	1.66
Insurance	.69
Fuel	1.77
Repairs	2.37
Total cash costs	33.34
Other costs:	
Family labor (2.377 hrs.)	9.95
Capital replacement	6.50
Interest on investment other than land	5.02
Interest on land	15.85
Total other costs	37.32
Total all costs	70.66
Return above cash costs	18.99
Return above cash costs and family labor	9.04
Return to total capital	2.54
Return to land	-2.66

Table D6--Sheep enterprises with 1,000 or more ewes, western states, 1982

Item	Dollars/ewe
Cash receipts:	
Slaughter lambs (.323 cwt.)	16.53
Feeder lambs (.254 cwt.)	12.99
Cull ewes (.290 cwt.)	2.99
Wool (6.342 lbs.)	5.27
Incentive payments	6.69
Total	44.47
Cash costs:	
Federal grazing fees (.617 AM)	1.15
Deeded rangeland (1.253 AUM)	0
Other pasture (.402 AUM)	3.09
Crop residue (.174 AUM)	.06
Hay (.085 Ton)	3.49
Grain (.417 Bu.)	1.26
Protein supplement (.019 Ton)	3.06
Salt and mineral (.070 cwt.)	.37
Veterinary and medicine	.87
Marketing	.21
Hired trucking	1.51
General farm overhead	1.24
Miscellaneous	2.77
Hired labor (1.505 hrs.)	6.57
Interest on operating capital	1.64
Taxes	.92
Insurance	.65
Fuel	1.75
Repairs	2.01
Total cash costs	32.62
Other costs:	
Family labor (1.103 hrs.)	4.70
Capital replacement	5.58
Interest on investment other than land	4.31
Interest on land	8.87
Total other costs	23.46
Total all costs	56.08
Return above cash costs	11.85
Return above cash costs and family labor	7.15
Return to total capital	1.57
Return to land	-2.74

Table D7--Sales, total cash costs and returns for beef cow enterprises in selected Bureau of Land Management grazing areas of the west by herd size, 1982^{1/}

Grazing area	Small				Medium				Large			
	Total sales	Cash costs	Grazing fee	Return above cash costs	Total sales	Cash costs	Grazing fee	Return above cash costs	Total sales	Cash costs	Grazing fee	Return above cash costs
Dollars/cow												
Arizona:												
Huolapai-Aquarius	133.92	111.87	22.76	22.05	159.68	128.65	22.73	31.03	165.23	153.55	17.42	11.68
California:												
Alturas	278.69	257.80	4.71	20.89	281.52	248.95	4.77	32.57	274.88	127.41	6.41	147.47
Colorado:												
Glenwood Springs	38.56	203.73	7.50	104.83	308.96	168.31	13.38	140.65	307.57	192.78	10.08	114.79
Kremmling	379.21	222.74	9.26	156.47	387.16	225.29	9.25	161.87	390.51	251.80	4.83	138.71
Idaho:												
Bruno-Kuna	257.49	144.74	8.70	112.75	230.90	172.23	8.16	58.67	224.14	197.79	7.61	26.35
Sun Valley	236.53	212.64	3.07	23.89	219.93	171.26	1.18	48.67	206.63	191.50	.55	15.13
Montana:												
Big Dry Prairie	254.43	159.35	2.77	95.08	256.96	186.67	2.78	70.29	243.87	149.71	2.74	94.16
Pothole	278.65	178.97	4.35	99.68	278.16	175.31	4.65	102.85	274.67	167.51	3.70	107.16
Nevada:												
Tonopah	212.70	150.87	21.16	61.83	195.47	110.80	22.56	84.67	195.79	110.43	15.68	85.36
Sonoma-Gelach	257.93	174.40	11.63	83.53	240.15	132.18	11.12	107.97	182.30	139.13	19.16	43.17
Oregon:												
Brothers	320.15	322.33	3.84	-2.18	272.45	197.33	3.87	75.12	254.56	183.35	4.33	71.21
Lakeview	248.61	179.39	14.83	69.22	287.49	192.80	9.17	94.69	248.79	130.15	12.25	118.64
Utah:												
Price River	200.68	239.17	8.34	-38.49	172.01	171.49	5.15	0.52	175.14	146.32	8.89	28.82
Mountain Valley	233.04	236.70	6.49	-3.66	253.87	181.37	8.80	72.50	248.85	256.49	5.09	-7.64
Wyoming:												
Grass Creek	271.84	195.70	6.08	76.14	260.62	176.02	10.32	84.60	282.12	187.60	8.60	94.52
Medicine Bow	290.18	202.05	7.51	88.13	273.94	200.34	4.79	73.60	269.27	192.05	4.62	77.22
Average	260.16	199.53	8.94	60.63	254.95	177.44	8.92	77.51	246.52	173.60	8.25	72.92

^{1/} Size groupings vary among geographical areas but generally are 0-99 cows, 100-499 cows, and 500 or more cows. Data are based on unpublished enterprise budgets prepared for the Bureau of Land Management by the Economic Research Service.

Table D8--Sales, total cash costs and returns for beef cow enterprises grazing selected National Forests, by herd size, 1982 1/

National Forest	Small				Medium				Large			
	Total sales	Cash costs	Grazing fee	Return above cash costs	Total sales	Cash costs	Grazing fee	Return above cash costs	Total sales	Cash costs	Grazing fee	Return above cash costs
<u>Dollars/cow</u>												
Region 1:												
Bitter-root	270.68	208.90	4.92	61.78	264.76	166.03	3.98	98.73	266.26	160.68	1.08	105.58
Nezperce	256.54	239.92	8.22	16.62	245.28	245.53	8.16	-.25	260.55	191.25	6.09	69.30
Region 2:												
Rio Grande	264.56	181.49	6.87	83.07	237.06	204.07	7.44	32.99	300.05	243.16	7.40	56.89
Black-hills	295.49	212.57	5.23	82.92	272.46	221.18	3.73	51.28	274.01	179.09	2.66	94.92
Region 3:												
Apache-Sitgreaves	279.30	143.94	12.32	135.36	278.47	140.36	13.25	138.11	277.39	145.28	10.86	132.11
Kiabab	236.89	103.10	22.67	133.79	222.34	116.86	14.62	105.48	223.19	114.30	8.57	108.89
Region 4:												
Manti-Lasal	232.46	242.78	7.72	-10.32	208.75	230.57	7.26	-21.82	211.10	170.40	13.60	40.70
Challis	256.41	211.34	9.22	45.07	246.79	181.05	9.36	65.74	219.82	171.37	7.56	48.45
Region 5:												
Klamath	322.82	181.41	4.82	141.41	312.36	256.35	3.61	56.01	373.14	161.89	1.40	211.25
Los Padres	270.85	125.66	6.95	145.19	272.55	163.80	7.67	108.75	273.30	185.60	1.55	87.70
Region 6:												
Okenogen	295.44	233.09	5.58	62.35	299.10	178.06*	4.16	121.04	299.71	192.66	4.23	107.05
Malheur	248.89	253.80	5.23	-4.91	287.78	219.67	4.90	68.11	311.67	163.88	2.95	147.79
Average	269.19	194.83	8.31	74.36	262.31	193.63	7.34	68.68	274.18	173.30	5.66	100.88

1/ Size groupings vary among geographical areas but generally are 0-99 cows, 100-499 cows, and 500 or more cows. Data are based on unpublished enterprise budgets prepared for the Forest Service by the Economic Research Service.

Table D9--Impact of alternative grazing fee levels on return above cash costs of Bureau of Land Management permittees

Area	Return above cash costs with grazing fee at following levels:					Change in return above cash costs from 2.00 fee level with grazing fee at following levels:				
	2.00	4.00	6.00	8.00	10.00	2.00	4.00	6.00	8.00	10.00
	Dollars/cow					Percent				
Hualapai-Aquarius, Arizona										
Small	19.24	-6.33	-31.90	-57.47	-83.04	100	*	*	*	*
Medium	28.22	2.68	-22.86	-48.40	-73.94	100	0.09	*	*	*
Large	9.53	-10.04	-29.61	-49.18	-68.75	100	*	*	*	*
Alturas, California										
Small	20.31	15.02	9.73	4.44	-.85	100	0.74	0.48	0.22	*
Medium	31.98	26.62	21.26	15.90	10.54	100	0.83	0.66	0.50	0.33
Large	146.68	139.48	132.28	125.08	117.88	100	0.95	0.90	0.85	0.80
Glenwood Springs, Colorado										
Small	103.90	95.47	87.04	78.61	70.18	100	0.92	0.84	0.76	0.68
Medium	138.99	123.95	108.91	93.87	78.83	100	0.89	0.78	0.68	0.57
Large	113.54	102.21	90.88	79.55	68.22	100	0.90	0.80	0.70	0.60
Kremmling, Colorado										
Small	155.32	144.91	134.50	124.09	113.68	100	0.93	0.87	0.80	0.73
Medium	160.73	150.34	139.95	129.56	119.17	100	0.94	0.87	0.81	0.74
Large	138.11	132.68	127.25	121.82	116.39	100	0.96	0.92	0.88	0.84
Bruno-Kuna, Idaho										
Small	111.67	101.89	92.11	82.33	72.55	100	0.91	0.82	0.74	0.65
Medium	57.66	48.49	39.32	30.15	20.98	100	0.84	0.68	0.52	0.36
Large	25.41	16.86	8.31	-.24	-8.79	100	0.66	0.33	*	*
Sun Valley, Idaho										
Small	23.51	20.06	16.61	13.16	9.71	100	0.85	0.71	0.56	0.41
Medium	48.52	47.19	45.86	44.53	43.20	100	0.97	0.95	0.92	0.89
Large	15.06	14.44	13.82	13.20	12.58	100	0.96	0.92	0.88	0.84
Big Dry, Montana										
Small	94.74	91.63	88.52	85.41	82.30	100	0.97	0.93	0.90	0.87
Medium	69.95	66.83	63.71	60.59	57.47	100	0.96	0.91	0.87	0.82
Large	93.82	90.74	87.66	84.58	81.50	100	0.97	0.93	0.90	0.87
Prairie Pothole, Montana										
Small	99.14	94.26	89.38	84.50	79.62	100	0.95	0.90	0.85	0.80
Medium	102.27	97.04	91.81	86.58	81.35	100	0.95	0.90	0.85	0.80
Large	106.70	102.54	98.38	94.22	90.06	100	0.96	0.92	0.88	0.84
Tonopah, Nevada										
Small	58.54	34.76	10.98	-12.80	-36.58	100	0.59	0.19	*	*
Medium	81.87	56.52	31.17	5.82	-19.53	100	0.69	0.38	0.07	*
Large	83.42	65.80	48.18	30.56	12.94	100	0.79	0.58	0.37	0.16

Continued

Table D9--Impact of alternative grazing fee levels on return above cash costs of
Bureau of Land Management permittees (Continued)

Area	Return above cash costs with grazing fee at following levels:					Change in return above cash costs from 2.00 fee level with grazing fee at following levels				
	2.00	4.00	6.00	8.00	10.00	2.00	4.00	6.00	8.00	10.00
	<u>Dollars/cow</u>					<u>Percent</u>				
Sonoma-Gerlach, Nevada										
Small	82.09	69.02	55.95	42.88	29.81	100	0.84	0.68	0.52	0.36
Medium	106.59	94.09	81.59	69.09	56.59	100	0.88	0.77	0.65	0.53
Large	40.89	19.27	-2.26	-23.79	-45.32	100	0.47	*	*	*
Brothers, Oregon										
Small	-2.65	-6.96	-11.27	-15.58	-19.89	*	*	*	*	*
Medium	74.64	70.29	65.94	61.59	57.24	100	0.94	0.88	0.83	0.77
Large	70.67	65.80	60.93	56.06	1.19	100	0.93	0.86	0.79	0.72
Lakeview, Oregon										
Small	67.39	50.73	34.07	17.41	.74	100	0.75	0.51	0.26	0.01
Medium	93.56	83.26	72.96	62.66	52.36	100	0.89	0.78	0.67	0.56
Large	117.12	103.35	89.58	75.81	62.04	100	0.88	0.76	0.65	0.53
Price River, Utah										
Small	-39.52	-48.89	-58.26	-67.63	-77.00	*	*	*	*	*
Medium	-.12	-5.91	-11.70	-17.49	-23.28	*	*	*	*	*
Large	27.72	17.73	7.74	-2.25	-12.24	100	0.64	0.28	*	*
Mountain Valley, Utah										
Small	75.39	68.56	61.73	54.90	48.07	100	0.91	0.82	0.73	0.64
Medium	83.32	71.72	60.12	48.52	36.92	100	0.86	0.72	0.58	0.44
Large	93.46	83.80	74.14	64.48	54.82	100	0.90	0.79	0.69	0.59
Grass Creek, Wyoming										
Small	75.39	68.56	61.73	54.90	61.73	100	0.91	0.82	0.73	0.82
Medium	83.32	71.72	60.12	48.52	36.92	100	0.86	0.72	0.58	0.47
Large	93.46	83.80	74.14	64.48	54.82	100	0.90	0.79	0.69	0.59
Medicine Bow, Wyoming										
Small	87.20	78.76	70.32	61.88	53.44	100	0.90	0.81	0.71	0.61
Medium	73.01	67.63	62.25	56.87	51.49	100	0.93	0.85	0.78	0.71
Large	76.65	71.46	66.27	61.08	55.89	100	0.93	0.86	0.80	0.73

Table D10--Impact of alternative grazing fee levels on return above cash costs of National Forest permittees

Area	Return above cash costs with grazing fee at following levels:					Change in return above cash costs from 2.00 fee level with grazing fee at following levels:				
	2.00	4.00	6.00	8.00	10.00	2.00	4.00	6.00	8.00	10.00
	Dollars/cow					Percent				
Bitterroot, Montana										
Small	61.17	55.64	50.11	44.58	39.05	100	91	82	73	64
Medium	98.24	93.77	89.30	84.83	80.36	100	95	91	86	82
Large	105.45	104.24	103.03	101.82	100.61	100	99	98	97	95
Nezperce, Idaho										
Small	15.60	6.36	-2.88	-12.12	-21.36	100	41	*	*	*
Medium	-1.26	-10.43	-19.60	-28.77	-37.94	*	*	*	*	*
Large	68.55	61.71	54.87	48.03	41.19	100	90	80	70	60
Rio Grande, Colorado										
Small	82.22	74.50	66.78	59.06	51.34	100	91	81	72	62
Medium	32.07	23.71	15.35	6.99	-1.37	100	74	48	22	*
Large	55.97	47.65	39.33	31.01	22.69	100	85	70	55	41
Blackhills, South Dakota										
Small	82.27	76.39	70.51	64.63	58.75	100	93	86	79	71
Medium	50.82	46.63	42.44	38.25	34.06	100	92	84	75	67
Large	94.59	91.60	88.61	85.62	82.63	100	97	94	91	87
Apache-Sitgreaves, Arizona										
Small	133.84	120.00	106.16	92.32	78.48	100	90	79	69	59
Medium	136.47	121.58	106.69	91.80	76.91	100	89	78	67	56
Large	130.77	118.57	106.37	94.17	81.97	100	91	81	72	63
Kiabab, Arizona										
Small	130.99	105.52	80.05	54.58	29.11	100	81	61	42	22
Medium	103.67	87.24	70.81	54.38	37.95	100	84	68	52	37
Large	107.83	98.20	88.57	78.94	69.31	100	91	82	73	64
Manti-Lasal, Utah										
Small	-11.27	-19.94	-28.61	-37.28	-45.95	*	*	*	*	*
Medium	-22.72	-30.88	-39.04	-47.20	-55.36	*	*	*	*	*
Large	39.02	23.74	8.46	-6.82	-22.10	100	61	22	*	*
Challis, Idaho										
Small	43.93	33.57	23.21	12.85	2.49	100	76	53	29	6
Medium	55.56	51.50	47.44	43.38	39.32	100	93	85	78	71
Large	211.08	209.51	207.94	206.37	204.80	100	99	99	98	97

Continued

Table D10--Impact of alternative grazing fee levels on return above cash costs of National Forest permittees (Continued)

Area	Return above cash costs with grazing fee at following levels:					Change in return above cash costs from 2.00 fee level with grazing fee at following levels:				
	2.00	4.00	6.00	8.00	10.00	2.00	4.00	6.00	8.00	10.00
	<u>Dollars/cow</u>					<u>Percent</u>				
Klamath, California										
Small	140.81	135.39	129.97	124.55	119.13	100	96	92	88	85
Medium	55.56	51.50	47.44	43.38	39.32	100	93	85	78	71
Large	211.08	209.51	207.94	206.37	204.80	100	99	99	98	97
Los Padres, California										
Small	144.33	136.52	128.71	120.90	113.09	100	95	89	84	78
Medium	107.80	99.18	90.56	81.94	73.32	100	92	84	76	68
Large	87.51	85.77	84.03	82.29	80.55	100	98	96	94	92
Okenogen, Washington										
Small	61.66	55.39	49.12	42.85	36.58	100	90	80	70	59
Medium	120.53	115.86	111.19	106.52	101.85	100	96	92	88	85
Large	106.53	101.78	97.03	92.28	87.53	100	96	91	87	82
Malheur, Oregon										
Small	-5.56	-11.44	-17.32	-23.20	-29.08	*	*	*	*	*
Medium	67.50	61.99	56.48	50.97	45.46	100	92	84	76	67
Large	147.43	144.12	140.81	137.50	134.19	100	98	96	93	91

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